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DUN'S REVIEW

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XXXVII of a series of Century old cities - Wheeling, W. Va.

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This Month's Cover

WHEELING

A view of Wheeling, W. Va., in the early 1850's, westward from Chapline Hill, the lithograph reproduced on the front cover was drawn from nature and printed in colors by E. Sachse & Company, of Baltimore. In the middle-distance steamboats dot the Ohio River, boundary line between the States of West Virginia and Ohio, whose rolling hills appear in the background of the illustration. . . . From the Phelps Stokes Collection, this print appears through the courtesy of the New York Public Library. . . . In the thin West Virginia spur which juts up northward between Pennsylvania and Ohio, Wheeling is no farther south than Philadelphia and about 60 miles west of Pittsburgh. It was founded by Col. Ebenezer Zane, of Virginia, in 1769. Five years later, at the top of what is now Main Street Hill, it was marked by a strong stockade, first known as Fort Fincastle, later renamed in honor of Patrick Henry. The town was laid out by Colonel Zane in 1793. In 1861, when Virginia seceded from the Union, a convention of deputies from the counties which chose to side with the North met at Wheeling and inaugurated the movement which resulted in the admission of West Virginia in 1863 as a separate State. For many years the capital of West Virginia, Wheeling is the State's second largest city; its estimated population is 65,000. In the vast surrounding coal fields mining is the foremost activity. Other industries which are important to Wheeling include the manufacture of iron and steel, pottery, glass, leather, tobacco, and lumber.

DUN'S REVIEW
for
FEBRUARY, 1940

STATUE OF THE FIRST FRESIDENT, WASHINGTON'S HEADQUARTERS, MORRISTOWN, N. J.—PHOTO BY FRENCH, FROM NESMUTH

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WILLARD L. THORP
Editor of DUN'S REVIEW

¶ *For those interested in the prints of century-old cities appearing on the* covers of DUN'S REVIEW, the publishers have arranged to provide mounted copies suitable for framing. Not all back numbers are available. Orders for copies of prints on current issues should be placed promptly, accompanied by check or money order. For prints set off by a French mat 13½ x 14¾ inches ready for framing the charge is $1. For prints mounted and framed, with glass, the charge is $3. If in New York City, add 2 per cent sales tax. . . . ¶ Information about subscription rates on page 57. . . . ¶ *Second cover photograph, Fairchild Aerial Surveys, Inc.* Frontispiece from the collection of Maxwell Simpson. . . . Printed in U. S. A.

"When he addressed the country through a message to Congress, wrote a letter to a mother who had given her sons to the supreme sacrifice, or made a speech dedicating a battlefield, he emphasized great issues, offered wise counsel, revealed the 'deathless music' of his spirit."

CHARLES A. AND MARY R. BEARD, "THE RISE OF AMERICAN CIVILIZATION"

PAY DAY, WORTHINGTON PUMP AND MACHINERY CO.—PHOTO BY EWING GALLOWAY

HIDDEN LABOR COSTS

ELMER F. ANDREWS

Formerly Administrator, Wages and Hours Division, United States Department of Labor

The work of the administrator of new social legislation has, typically, two sides: to interpret reasonably the provisions of the laws and to help develop in others a more complete understanding of their intent. Lack of such understanding followed by hasty protests, this recent administrator suggests, is frequently costly. This is one of a series of articles by men of decided, often conflicting, points of view.

THE COST to industry of opposing socially desirable legislation, both Federal and State, through lobbying and propaganda during the last 30 years must have been stupendous. Moreover, there are other unnecessary costs which arise out of inadequate understanding of the laws and out of failure to take advantage of their benefits.

The point of view of some toward workmen's compensation legislation, and, more recently, toward social security legislation, has resulted in many an amusing incident. Perhaps these stories mean only that the men who figured in them were too close to the trees to see the forest.

When the New York State workmen's compensation act was before the Albany legislature in 1913, opponents charged that the act would encourage workmen to injure themselves to obtain benefits (based on two-thirds of pay with a then maximum of $20 a week), that an operator of a paper-cutting machine would deliberately stick his hand under the blade to obtain an award for its loss. These observations can be found in the records of the legislative hearings.

For several years after the compensation act became law some employers continued bitterly to criticize it. Today it would be difficult to find anyone who would advocate its repeal.

When the New York State Unemployment Insurance bill was under discussion in 1933, 20 years later, arguments were heard similar to those used in 1913 against workmen's compensation. Workmen would quit their jobs, it was said, to obtain unemployment benefits (based on one-half of wages, but not more than $15 a week) preferring to loaf at half pay with, of course, the chances of not being rehired at the end of the maximum benefit period of sixteen weeks.

Representatives of industry from all over the United

States expended time and money to come to Albany to oppose the bill, probably partly because it was to come to a vote before the vote on the Social Security Act in Congress. It was important because, unlike some of the other early State acts, the New York bill contained no clause making its effect contingent upon the enactment of the Federal Social Security Act. Then, too, the legislatures of many States were considering similar laws; the defeat of New York State act might well have had a telling effect on Congress and on the other States.

The Social Security Act with its unemployment compensation provisions may not be fully accepted as yet by all employers, but it is safe to assume that it will never be repealed and that it will soon be taken just as much as a matter of course as is workmen's compensation today. The purposes of the two acts are indeed not greatly different, the latter reimburses an employee for loss of wages caused by an industrial accident, usually through no fault of his own; the former for wages lost from the accident of losing a job, which is usually not his fault.

In 1913 and in 1933 there were more than a few indications that the trend was toward legislation of the kind that resulted; it seems strange now that the wastefulness of fighting the inevitable was not generally foreseen. An only slightly different sort of shortsightedness arose in connection with silicosis.

Today silicosis is compensated for as an occupational disease in a number of States, but not until recently have State legislatures recognized the fact that it does arise from industrial occupations and acted accordingly, although medical authorities have known the truth for years.

GALLOWAY

Industry in New York State did not support the necessary legislation until a wave of civil actions swept the State, brought against employers by enterprising lawyers in the name of widows of alleged silicosis victims. In one upstate city alone suits were filed asking for more than $1,000,000 against a single employer. When sympathetic juries started to bring in $50,000 verdicts for the death of former employees who in some instances had probably died from tuberculosis rather than from silicosis, the attitude of industry rapidly changed. No longer was there opposition to the inclusion of silicosis in the workmen's compensation act with its limited and relatively modest death benefits.

Still another sort of unnecessary labor cost—somewhat less "hidden"—is illustrated by a second incident involving the application of the workmen's compensation act.

At the time of a change in management some years ago a large manufacturer ceased to be a self-insurer under the New York State workmen's compensation act and placed insurance against this risk. Then in the safety contest sponsored yearly by Associated Industries of New York State, Inc., the company established a phenomenal record for man-hours worked without a lost-time accident.

During the period noted this company paid at least $25,000 as the premium on its workmen's compensation policy while actually there was no cost chargeable to the act except for the maintenance of the safety work and the slight medical cost for first aid work—a cost which would exist in any well managed manufacturing company, whether there was a workmen's compensation law or not.

Had the company remained a self-insurer, not only would the $25,000 in premium have been saved, but the bonds, deposited with the Industrial Commissioner of the State of New York for the privilege of becoming a self-insurer and to secure the payment of compensation awards to the claimants in the event the employer fails to do so, would have been paying their regular interest to the depositor.

In New York State, the amount of security required for deposit to become a self-insurer is often no more than a year's premium for an insurance company policy, but the minimum deposit is $15,000 in Federal, State, county, or municipal bonds of first water. Arrangements must be also made for the employer to be represented at the workmen's compensation hearings if his employees' claims are to be contested. There are concerns which specialize in this work if the employer does not care to bother with it. If a well-managed company is of good financial standing and has an adequate safety organization it is eligible for the privilege of becoming self-insured.

Sometimes these hidden and unnecessary labor costs are not as easily recognizable as in that instance, but slip in because they seem to be part of the usual way of carrying out new, unfamiliar, but praiseworthy, undertakings.

Many workers in the lower salary brackets, and sometimes even in the upper, reach retirement age without savings to tide them over during the remaining years of life. Many generous employers in the past have merely kept these retired employees on the payroll at reduced salaries, but enough to live on. This generosity has sometimes led to a serious financial situation as a

BY PROFESSION Elmer F. Andrews is an engineer; but he is best known, probably, as the recent administrator of the Wages and Hours Division of the United States Department of Labor.

Mr. Andrews studied at Rensselaer Polytechnic Institute, Troy, N. Y.; began work with the New York State Compensation Insurance Rating Board; then went to the compensation insurance department of the Maryland Casualty Company. About this time he passed through a brief interlude as an Army air pilot during the World War's first installment. Then back to the slide rule.

He had charge of constructing sugar warehouses and a railroad in Cuba. Successively, three railroads—the New York Central, Bangor-Aroostook, and the Seaboard Airline —employed him. The next post he held, manager of the Highways and Bridges Bureau of the Queensboro Chamber of Commerce, New York City.

In 1929 Governor Roosevelt appointed him Deputy Industrial Commissioner of New York State. In 1933 Governor Lehman named him Commissioner. He has served also as a National Labor Board Advisor in the coal regions and as Chairman of the American Delegation of Official Observers at the International Labor Conference, Geneva, Switzerland.

company has aged and a large number of employees have reached retirement age at the same time. Thus pension systems or retirement annuity plans, for instance, are justly becoming increasingly more popular with progressive business concerns. The pension plans are usually designed to supplement the old age benefits of the Social Security Act.

This retirement pay will, no doubt, become in the public mind as much a right to the worker as workmen's compensation and unemployment insurance. Social justice is splendid, but in fairness to the employer it should not be the basis of undue profit to other branches of business enterprise.

Hopefully, enlightened self-interest will lead insurance companies underwriting the pension plans to keep the margin of profit and brokerage fees at a reasonable level. Otherwise pension plans will be carrying unreasonable charges, and business concerns will be encouraged to create their own trust funds to finance their retirement systems.

Membership of employees in group annuity plans is usually voluntary, but experience has shown that nearly all employees are glad to join and contribute through payroll deductions. This willingness to contribute will decrease if the overhead cost of the underwriting is exorbitant. One manufacturer discovered recently that some of his employees were paying more for their annuities in the group plan than they would have if they had purchased individual policies through an outside insurance agent.

By being less credulous and crusading, by being more hardheaded and realistic—which are often spoken of as business virtues—industry might avoid still other costs.

Legitimate trade organizations serve many useful purposes, and their cost to industry is not wasteful unless there are too many in the same area of industry with overlapping activities and jurisdictional jealousy. However, there are more than enough one-man organizations which proport to speak for multitudes. The support of these paper organizations by industry is a financial loss which must be charged as a labor cost when their purpose is that of combating desirable labor legislation.

During the last year that Mr. Roosevelt was Governor of New York, the State Senate through a committee conducted an investigation of the cost of operating the State departments. The head of one of these one-man organizations raised funds so that the investigating committee could employ one of the country's leading industrial engineering firms to study one of these State departments. The results must have shocked him.

The report of the investigators concluded with the statement that the efficiency of the department compared favorably with the best operated of private enterprises and suggested that, because the work of the department was of such direct benefit to industry, industry should pay for it directly, rather than through general taxation.

In this instance the contributors not only received no return so far as their political intent was concerned, but they might have cost all industry in the State large additional yearly expenditures for State supervision

had the Legislature adopted the recommendations of this investigating agency. And this almost happened, for the Senate passed the appropriate legislation. The suggestion was not rejected until it reached the Assembly.

The removal of a business from a section of the country where good wages and working conditions exist to an area of low wages and often no taxation, may save labor cost temporarily for the individual concern, but the unfair competition thus created results in an unjust burden to the non-migratory concern.

In New York State, Labor Department officials have often been told that the progressive social laws of the State tend to drive industry out of it. They always have been convinced that this was not so and have statistics to prove it false, but there was at least one real example, and it seems to show that there are hidden labor costs even in short-sighted efforts to reduce them.

In Atlanta early last Summer when the Administrator of the Fair Labor Standards Act held a public hearing on the recommendation of the Textile Industry Committee for a minimum wage of 32½ cents an hour, one man appeared in opposition to the minimum wage and also to the hour provisions of the act, although the latter are mandatory and are not a subject for the hearing. This employer about four years ago had abandoned his mill in New York State and established one in Georgia; the New York State laws prohibited the employment of females and minors after ten o'clock at night. Now this cursed Federal Act had come along to cramp his style in Georgia. In New York and in other States having advanced labor legislation, the employer at least knows the worst and has assurance that little, if any, new social legislation lies ahead.

The Fair Labor Standards Act may have increased payrolls in some industries, certainly a desired result where pay was as low as 10 and 15 cents an hour, but the gymnastics of some employers in trying to escape even its more simple and desirable provisions have been needlessly costly.

High paid executives travelled to Washington from all parts of the country to argue against paying their watchmen 25 cents an hour (now 30 cents). According to these executives most watchmen are old employees given their jobs as a reward for long service and are glad to receive as little as $8 or $10 a week.

Insurance companies have a different idea of watchmen. They feel that a man reliable enough to be put in charge of a plant, sometimes worth millions of dollars, to protect it against fire or theft should be paid well for this responsibility.

No one knows the cost in salary and travel of these executives who made the watchmen-protest-pilgrimage to Washington, but it would have gone a long way toward caring for the increases needed to bring the wages of watchmen up to 25, or even 30 cents, an hour.

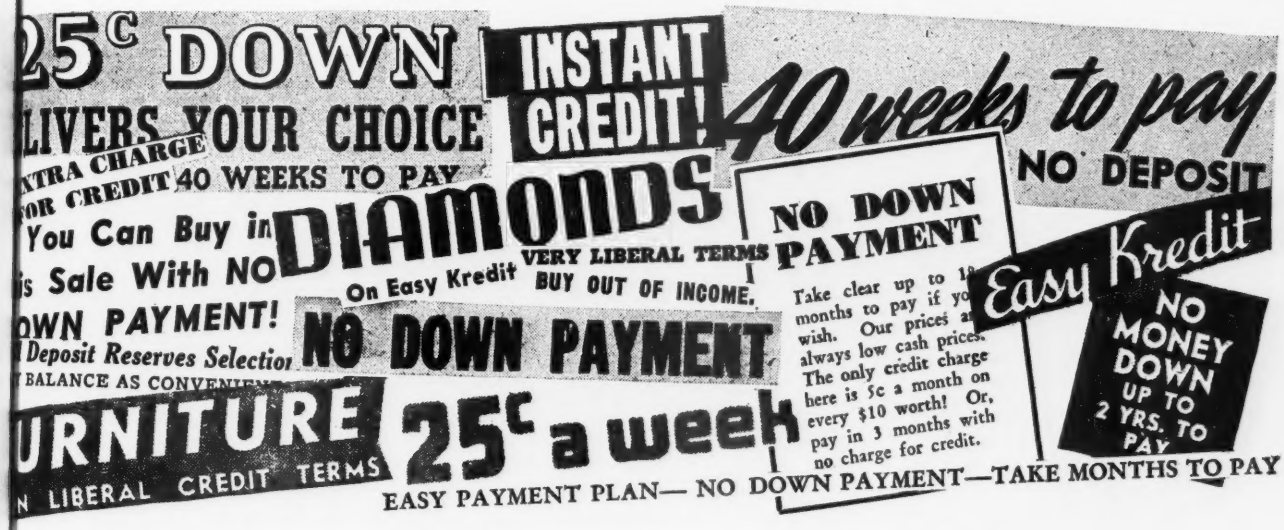
There can be unnecessary expense, too, at the other extreme, in more-than-complying with the law. A useless cost unjustly blamed on the Wage and Hour Act was the expense of installation of complicated procedures and systems or of the purchase of expensive business machines for all sorts of record keeping, reporting, and accounting purposes. The Wage and Hour Administration repeatedly advised industry that no periodic reports were required and that any simple but accurate payroll records would suffice. Without doubt new laws are necessarily attended by some confusion, but it hardly seems believable that such extensive record keeping would have been set up if the available printed matter had been read carefully.

By no means of slight importance in the array of avoidable labor expense, the methods used to resist collective bargaining and to delay the "new" developments in industrial relations often have been extremely costly. During the NRA days the writer was asked by the National Labor Board to help settle a strike in the soft coal fields of Alabama. The trouble started when a miner asked his foreman how soon the new daily rate of pay under the code was to go into effect. Intelligent labor relations attitudes had not been instilled in men this far down in the managerial ranks, though it is of great importance. The foreman simply cursed the worker and told him to mind his own business. The inaccurate word then spread among the miners that the company did not intend to pay the code wage, and a strike ensued. It soon spread to most of the other mines in the region, resulting in the unionization of the workers and the demand for union recognition.

Courtesy between employers and employees is a very simple but very sound basis for industrial peace and an excellent formula to prevent unnecessary labor costs. Equally valuable are the willingness and determination to accept that legislation which seems inevitable, to forego the luxury of emotional acts, and to acquaint oneself thoroughly with the provisions of the new rules of the game.

EWING GALLOWAY

WHO BUYS WHAT ON THE INSTALLMENT PLAN?



RALPH A. YOUNG
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and

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OVER the last twenty years the practice of financing consumer purchases by installment or deferred payment credit has acquired increasing importance in the marketing of commodities. Although it is known that the use of installment credit has spread through many income levels, no comprehensive statistical information on its use by various consumer groups has been available.

The aspects of installment debt discussed in this article may be found treated at greater length in "The Statistical Pattern of Installment Debt," *Bulletin 76-7* published by the National Bureau of Economic Research.

The source of the basic data for that bulletin was a statistical project of the Works Progress Administration, "The Study of Consumer Purchases." The data was collected in 51 cities, 140 villages, and 66 farm counties in 30 States, chosen to represent different geographic regions, degrees of urbanization, and types of farming areas. Information on family expenditures and changes in family debt was obtained from some 60,000 families, all non-relief and mostly native white.

One important qualification regarding the basic data should be borne in mind. On the original schedules the information obtained from each family referred only to net change in installment debt during the year, not to the existence of installment debt or to the total amount of such debt incurred.

As a result of this method of reporting indebtedness, families owing exactly as much at the end of the year as at the beginning were not included among families having a net change in debt, nor were families that had incurred installment debt during the year and paid it off completely by the year-end; but families were included whose indebtedness at the beginning of the year was entirely liquidated by the end.

For the expression "families having a net change in debt" there has been substituted in this article the term "families indebted," used to refer to families indebted during the year and not merely at the year-end, as it might seem to imply.

The terms "frequency of debt" and "extent of use of installment credit" will be substituted as synonyms for the percentage of families having a net change in debt or the percentage of families indebted during the year. As we use the phrase "extent of use of installment credit," it pertains to the percentage of families making payments on installment purchases,

whether bought in the given year or earlier—in other words, to the percentage of families having a net change in debt. Thus, it does not mean the percentage of families making installment purchases during the year. The latter interpretation of the term is best approximated in our data by the percentage of families increasing debt.

The principal findings of this study of installment debt may be summarized under ten headings:

1. *All Families*—Almost one-quarter of all non-relief families in the United States had a net change in installment debt during 1935-1936, and the use of installment credit, as indicated by these data, varied with income level. The proportion of families in each income class indebted for installment purchases rose steadily from approximately 10 per cent in the group receiving less than $250 a year to 32 per cent in the $1,750-$2,000 band, and then declined consistently.

2. *During Expansion*—A sharp increase in installment buying occurred during the expansion period 1935-1936. More than 70 per cent of the families having a net change in installment debt increased their installment obligations. At all income levels more families were increasing than were decreasing their obligations, but the increases were relatively more frequent among lower than among higher income families.

3. *Increases and Decreases*—Both the average debt-increase of families increasing debt and the average debt-decrease of families decreasing debt (for all types of commodities combined) rose steadily as income advanced, indicating that the use of installment credit is usually associated with purchases that in price and quantity are related to size of family income. But both average increase and average decrease in debt formed a diminishing proportion of total family income as income increased from the lowest to the highest levels. Average increase declined from 61 per cent of income in the lowest income band (under $250) to 4 per cent in the highest band ($5,000 and over).

4. *Net Increase*—The sum of all increases minus sum of all decreases in installment debt attributable to non-relief families totalled over $407,000,000. Families having incomes between $1,000 and $2,000 were responsible for almost half of this net increase in debt, though only 40 per cent of non-relief families are in this income band.

5. *Above and Below $1,500*—Income classes below $1,500 included a smaller share of the gross increase (sum of all increases) in debt than of the number of families increasing debt, and a smaller share of the gross decrease (sum of all decreases) than of the number of families decreasing debt, indicating a smaller average size of debt. Families above the $1,500 level, on the other hand, exhibited the reverse tendency, holding a more than proportionate share of the gross increase and decrease in installment debt. A disproportion, though not so marked, existed also between the distribution of families indebted for installment purchases and the distribution of the net increase in debt.

6. *Commodities*—Almost one-third of the installment-debt changes of families living in metropolises and large and middle-size cities applied to purchases of furniture, one-fifth to automobiles, one-third to electric refrigerators and "other electric equipment," and one-twelfth to radios. Less than one-tenth of the debt changes related to the "miscellaneous commodity" category, which includes non-durable or "soft" consumers' goods; this suggests that the installment credit device had not made extensive inroads into the soft goods market by 1935-1936. Soft goods, however, are often sold on very short contracts with payments scheduled weekly, so that purchases made and paid off during the year would have escaped reporting under the method employed in obtaining the original sample data. Therefore the "miscellaneous commodity" category underestimates the number of soft goods installment transactions during this period.

Many families, of course, carried installment debt on more than one commodity. Our data show that as income

Electric refrigerators and electrical equipment accounted for about one-third of the articles sold on terms.

EWING GALLOWAY

EWING GALLOWAY

Another third of installment sales (in number, not dollars) were of furniture. More families in the $750-$1,000 group bought furniture on installments than in any other.

rose to the level of $3,000, there was an increasing tendency for families to owe for more than one commodity, but above this level the tendency was reversed.

Automobile purchases, the greatest source of dollar volume of installment debt, were responsible for over 50 per cent of the gross increase in installment debt during the year 1935-1936, and for almost 60 per cent of the net increase. Furniture purchases represented the second largest source of gross increase, and the largest source of gross decrease in debt, so that in this year they formed a relatively insignificant element in the net increase in installment debt.

7. *Commodities and Incomes*—The use to which installment credit was put varied in different income groups. In the lower income levels (under $1,000) furniture was the commodity most frequently financed on installment terms, with radios, "other electric equipment," and miscellaneous articles next in importance. Families with incomes between $1,000 and $2,000 were making installment payments on furniture, automobiles, electric refrigerators, and "other electric equipment" more frequently than on the other types of commodies; and above the $2,000 income level installment debt was most often related to automobiles.

8. *Commodities and Debt Increases*—For every type of commodity financed on installment terms, more families in each income group were increasing than were decreasing debts, and increases were in every case relatively more numerous among lower income families (under $2,000) than among higher income families. The ratio of families increasing to those decreasing installment obligations was smaller, however, for furniture and electric refrigerators than for other commodities. This may have resulted from the fact that furniture and electric refrigerators are usually sold on longer terms.

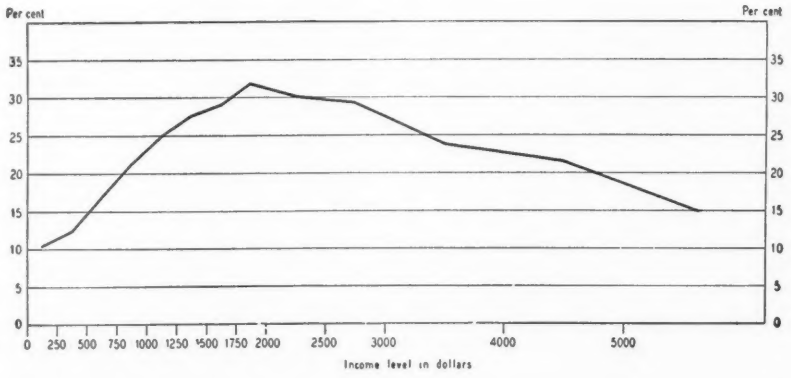
For all commodities except furniture the average debt-increase was generally higher than the average debt-decrease. That average debt-increase is higher is due in part to differences in the average duration and age of installment contracts as between families increasing and those decreasing debt; it suggests also that possibly unit installment purchases were larger, on the whole, during 1935-1936 than in the preceding year, and that unit furniture purchases, on the other hand, were smaller during 1935-1936 than in 1934-1935. For each commodity group both average debt-increase and average debt-decrease were directly related to income; that is, they rose as income advanced. This supports the contention that the use of installment credit is usually associated with purchases of commodities at prices or in quantities compatible with size of family income.

The proportion of gross increase and gross decrease in debt originating with families having incomes under $1,000 and over $3,000 varied widely for the different commodities. For all commodities except automobiles, however, approximately half of the gross increase and gross decrease in debt came from families having annual incomes between $1,000 and $2,000. Most of the net increase in installment outstandings (for all commodities except automobiles) originated with families whose annual incomes were under $2,000.

9. *Size of Community*—The use of installment credit is definitely an urban phenomenon; data covering the North Central region indicate that approximately 70 per cent of families indebted for installment purchases were urban dwellers. In all income classes the frequency of installment debt was highest in large, small, and medium-size cities in this region, in the order mentioned; villages ranked fourth and metropolitan centers fifth. Among farm families the frequency of debt was very much lower than in any other type of com-

munity, probably because of the irregular flow of farm income. Urban families were most often indebted for furniture and next most frequently for automobiles, while among village and farm families automobiles were foremost. Over 50 per cent of the families indebted for all commodities, except automobiles (43 per cent) and the miscellaneous group (32 per cent), were residents of large or small cities, although only one-third of the population lived in these communities. In contrast, metropolitan and farm families in general constituted a smaller proportion of the families indebted for installment purchases than of the population.

I. Installment Debt and Incomes—Percentage of Non-Relief Families Having a Net Change in Installment Debt, 1935-1936, by Income Level

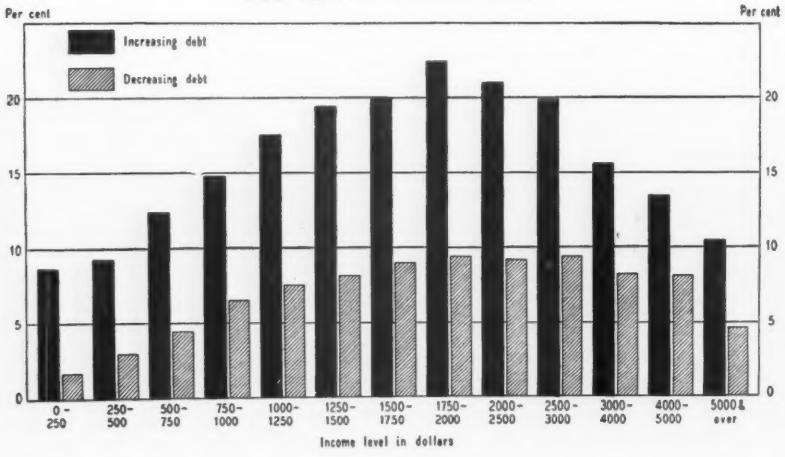


10. *Regions*—The use of installment credit varied also among regions. One-third of all families in the Pacific region were indebted for installment purchases, one-fifth of the families in the North Central region, and one-fourth in the other regions. The Pacific region, however, had the highest frequency of debt only in the income levels below $2,000. Above this level, families in the South used installment credit to a greater extent than Pacific families. Debt for furniture, refrigerators, and radios was most prevalent in the South, but the greatest debt frequency for automobiles and miscellaneous goods occurred in the Mountain-and-Plain region, and for "other electric equipment" in the Pacific region.

These regional differences in installment buying behavior only partly reflect cultural and social variations. Since installment buying is primarily an urban phenomenon, the type of city that predominates in a given region, and the distribution of urban family incomes in the region, must also be considered important factors causing regional variation.

Almost one-quarter of the non-relief families in the United States were indebted for installment purchases during 1935-1936, and installment credit was used by all but the very wealthy. The extent of its use, however, varied considerably at different income levels, as is illustrated in chart I.

II. Increases and Decreases—Percentage of Non-Relief Families Increasing or Decreasing Installment Debt, 1935-1936, by Income Level



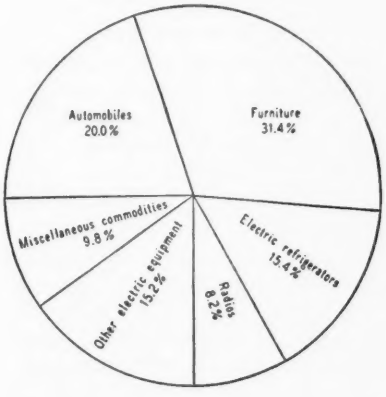
By Income Groups

Less than 13 per cent of families in the very low annual income levels (under $500) were indebted for installment purchases, and roughly 20 per cent of those between $500 and $1,000. The percentages continue to rise steadily to a peak of 32 per cent at the $1,750-$2,000 income level, and then decline consistently; only 15 per cent of families with income of $5,000 or over had a change in installment debt. At all income levels between $1,000 and $4,000, however, approximately one out of every four families was indebted for installment purchases.

Furthermore, over 90 per cent of families indebted for installment purchases had incomes of less than $3,000 a year. A comparison of the distribution of all non-relief families and of families indebted for installment purchases shows that in some income groups there was a considerably larger proportion of installment debtors than of the total population. More than one-third of non-relief families in the country have incomes under $1,000 a year, but barely one-quarter of the families carrying installment debt were in these

III. Installment Debt and Commodities

(Percentage Distribution of Debt Changes, 1935-1936, by Commodities)



income classes. On the other hand, each income band between $1,000 and $3,000 included a larger proportion of families indebted for installment purchases than of all non-relief families. Approximately 40 per cent of non-relief families had incomes between $1,000 and $2,000, but almost half of the families indebted for installment purchases were in this income band; and the 15 per cent of families who had annual incomes of $2,000 to $3,000 comprised over 18 per cent of the installment purchasers. Between $3,000 and $5,000 the number of families having debt was about proportionate to the number of families having incomes within these limits, but above $5,000 a less than proportionate number of families had installment debt.

Installment credit, first used mainly for the purchase of furniture, began to develop rapidly in the early 1920's as a means of facilitating the purchase of automobiles. It has since spread to many less durable commodities, being widely promoted today even in the purchase of "soft" or perishable goods. Our estimates indicate that about 80 per cent of the number of 1935-1936 installment-debt changes relate to commodities other than automobiles.

Furniture was the source of about one-third of the installment-debt changes in 1935-1936. Automobiles were second in importance, being the source of installment debt in 20 per cent of the debt changes; approximately another one-third of the installment-debt changes were divided almost equally between electric refrigerators and "other electric equipment" (chart III). These estimates are based on data obtained from families living in metropolises and large and middle-size cities. They show distinct variations in the distributions of installment-debt changes by kind of commodity in different types of communities in one region, and it seems probable that if we were to include data from smaller communities the proportions would differ to some extent. Automobiles would form a larger, and furniture and electric refrigerators a smaller, proportion of the total debt changes.

Less than 10 per cent of the debt changes were in the miscellaneous commodity category, which includes "soft" goods purchased on installment terms as well as other durable goods not included in the individual commodity groups. This suggests that installment credit had not yet made extensive inroads into the "soft" goods market by 1935-1936. Installment purchases of soft goods, however, are made on relatively short-term contracts with payments usually scheduled weekly, and since families who incurred and paid off obligations within the year are not included in these installment-debt data, the miscellaneous category probably underestimates the number of installment transactions of "soft" goods in liquidation during this period.

Smaller Share

Furniture and electric refrigerators had less than proportionate shares of the total number of debt-increases; almost 60 per cent of the reductions in installment obligations related to these two items, compared with less than 42 per cent of the increases in debts. The other commodities had substantially smaller shares in the distribution of all debt-decreases than of all debt-increases.

The number of installment-debt changes involving a given commodity is not an index of that commodity's significance as a source of the dollar volume of installment debt. In volume automobiles were by far the most important single source of installment debt, a fact accounted for by their higher unit prices compared with other commodities. About one-fifth of the number of installment-debt changes during 1935-1936 were for automobiles, but in dollar amount of installment credit they were responsible for over 50 per cent of the gross increase and almost 60 per cent of the net increase.

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About 32 per cent of families in the $1,750-$2,000 class made installment purchases; the average for all was less than 24 per cent.

EWING GALLOWAY

Signatures on installment sales' dotted lines were most frequent in cities with population of over 100,000 and less than 1,500,000.

Furniture represented a large percentage of the number of installment-debt changes, but it was only a minor element of the net increase in dollar outstandings. This reflects the fact that although many more families were increasing than were decreasing furniture obligations, in all income bands but two the average debt-increase (of families increasing debts) was less than the average debt-decrease (of families decreasing debts), and it would indicate that unit installment purchases of furniture had been larger in the preceding year (1934-1935) than in the one under consideration.

Furniture and Cars

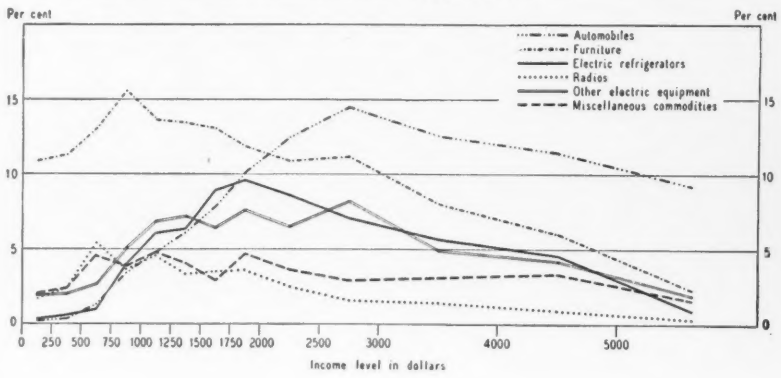
Furniture was more commonly financed by installment payments than any other commodity, with automobiles second. Chart IV shows, however, that the installment financing of furniture was relatively most frequent only in income bands below $2,000; above this level the purchase of automobiles took first place. In income groups below $1,000 families indebted for automobiles were fewer than those indebted for any other commodity; but in the income group above $5,000 they were four times as numerous as those indebted for furniture, comprising 9 per cent of all families having such incomes, compared with 2 per cent indebted for purchases of furniture.

Below the $1,000 level radios, "other electric equipment," and miscellaneous commodities ranked closely together in frequency of financing on installment terms. Between $1,000 and $1,750 refrigerators and "other electric equipment" were, except for furniture and the increasing number of automobiles, the most frequent items financed. Above $1,750 automobiles assumed the second rank, and above $2,000 they were the commodity most frequently financed, refrigerators and "other electric equipment" taking third and fourth places respectively.

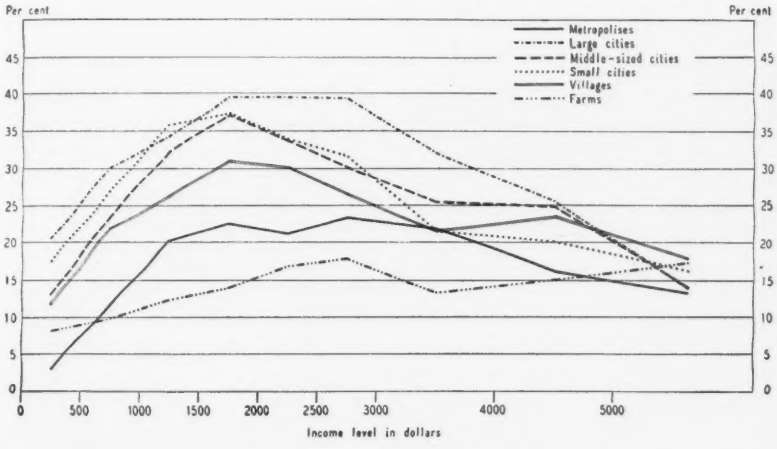
In the figures on installment debt by commodities each family appears once for each commodity purchased. Many families, of course, carry installment debt on more than one commodity; comparison of the frequency of debt for all commodity groups with that for all families reporting a net change in debt indicates that as income rises there is an increasing tendency for families to be indebted for more than one commodity at a time. At the $3,000 level this trend is reversed.

For all commodities except automobiles more than nine out of ten families indebted for installment purchases had

IV. Installment Debt, Commodities, and Incomes—Percentage of Non-Relief Families Having a Net Change in Debt for the Purchase of Six Commodities, 1935-1936, by Income Level



V. Installment Debt and Size of Communities—Percentage of Non-Relief Families in Different Types of Communities Having a Net Change in Debt, 1935-1936, by Income Level



incomes of less than $3,000, and eight out of ten families indebted for automobiles had incomes not exceeding this amount. There were, however, marked differences in the commodity-buying behavior of various income groups. Thus while 25-30 per cent of families using installment credit for purchases of furniture, radios, and miscellaneous commodities had incomes below $1,000, this income group embraced only 6, 9, and 15 per cent of families indebted for automobiles, electric refrigerators, and "other electric equipment," respectively. Again, though families with incomes under $2,000 accounted for 76, 82, and 73 per cent of the installment-debt changes for furniture, radio, and miscellaneous commodities respectively, only 46 per cent of families indebted for automobiles, 65 per cent of those making installment payments on refrigerators, and 67 per cent of those paying for "other electric equipment" were under this $2,000 of income limit.

These differences seem to indicate a fairly consistent relationship between commodity price, purchaser's income, and the use of installment credit to finance the purchase. Automobiles, which sell at high unit prices, were purchased on installment mainly by the middle and higher income families. Electric refrigerators, also bearing relatively high unit prices, were purchased more often by medium than by higher income groups. Radios, on the other hand, which may sell for as little as $7 or $8, were bought on installment less often than any other commodity, and principally by low income families. The wider dispersion of installment purchasers of furniture, "other electric equipment," and miscellaneous commodities, throughout all income levels, is probably due to the greater range of articles within each of these groups and to the wide price differences based on quality. In short, higher priced furniture is purchased on installment by a higher income group than is lower priced furniture.

Families receiving equivalent incomes but living in different types of communities vary considerably in installment-debt behavior. Data covering the installment purchases of all commodities combined indicates that in 1935-1936 the frequency of installment debt was greatest in urban communities. One out of every three families living in large cities, just under this number in middle-size and small cities, and one out of five metropolitan families, were indebted for installment purchases. Debt occurred in one out of four village families—slightly more often than among those in metropolitan areas—and only one out of nine farm families had installment debt.

The less extensive use of installment credit by families living in metropolises compared with those living in other cities is in part due to less frequent ownership of automobiles. Higher automobile operating costs and the greater adequacy of transport facilities, as well as the higher cost of living in

The highest proportion of families buying radios on installment credit, and even so it was less than 6 per cent of them, appeared in the $500-$750 income group.

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general are the primary factors which operate against automobile ownership in metropolitan areas.

The lower prevalence of debt among farm families can probably be traced to the irregular flow of agricultural income, which militates against a credit plan calling for regular monthly payments over a long period. Besides this, farmers, as entrepreneurs, tend to intermix production and consumption finance, and to obtain their credit accommodation more frequently from specialized farm credit agencies. Installment buying by farm families is confined mainly to automobiles and farm equipment, and it is facilitated by special contracts adjusted to the irregularity of farm income.

Chart V shows by income levels the prevalence of installment debt in each type of community. Generally speaking, it rose with income to the $2,000 level, then tapered off through the higher income brackets; but in large cities the decline did not set in until the $3,000 income level, and in farm communities the peak was not reached until the $2,500-$3,000 level. In each income class under $5,000 the frequency of debt was highest among families in large cities, where installment debt was owed by more than one-fifth of families with incomes below $500 and by almost two-fifths of families with incomes of $1,500 to $3,000. Families who lived in small cities ranked second in frequency of debt up to $3,000, after which those in medium-size cities took second rank. Village families ranked fourth up to about the same level.

Metropolitan families with incomes below $1,000 made little more use of installment credit than did farm families with equivalent income; and only a little more than one-fifth of metropolitan families with incomes of $1,000 to $3,000 had installment debt. It is interesting to note that installment debt among farm families was more general in income levels above $2,000 (where it averaged about one-sixth) than it was for families below this level.

A special analysis, by commodities, of families indebted for installment purchases in the North Central region, indicates that in the urban communities of this region furniture purchases were the most frequent base of installment debt, while in villages and on farms automobile purchases were most important. Automobiles were second most important in urban centers, "other electric equipment" third, and electric refrigerators fourth.

One-Half Buy One-Third

Also in the North Central, large and small cities are shown to have included the largest percentage of installment debtors of all commodities except the miscellaneous group. Although only one-third of the population of the region lives in large and small cities, these communities together included 50 per cent or more of the families indebted for furniture, electric refrigerators, radios, and "other electric equipment," and 43 per cent of families indebted for the installment purchases of automobiles.

On the other hand, the proportion of installment debtors that lived in metropolises tended to be smaller than the metropolitan share of regional population, except that the proportion indebted for furniture and miscellaneous items slightly exceeded the metropolitan share of population. There was some variation in middle-size cities. They were relatively well represented among families indebted for electric refrigerators and "other electric equipment" and slightly under-represented in miscellaneous installment purchases, but they had about a proportionate number of families indebted for purchases of automobiles, furniture, and radio receiving sets.

The villages' share of families indebted for installment purchases of automobiles, "other electric equipment" and miscellaneous commodities was roughly in proportion to their share of population, but they were under-represented among families indebted for furniture, electric refrigerators, and radios.

Farm families, which constituted 17 per cent of the regional population, did not have installment debt for any commodity commensurate with their numerical importance in the population, although in the case of automobiles and miscellaneous commodities the disproportion was slight. The extremely low percentage of farm families among buyers of electric appliances is attributable in large measure to the lack of electric power facilities in agricultural areas.

EWING GALLOWAY

So much an accepted institution is installment credit, at least in one-quarter of American families, that the head of one of them may well be paying for the desk he is writing on without reflecting as he does that the desk is not entirely his.

INVENTORIES *during the* WORLD WAR

The Record of 111 Companies

CHARLES PHELPS CUSHING

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Coincident with the upward swing of prices in 1916 the inventory index, which had been moving parallel to prices, advanced with sufficient sharpness to indicate an actual increase in physical inventories.

DURING the World War, the value of inventory held by manufacturing corporations ran rapidly upward. By the end of 1920 it had nearly trebled, then fell to about twice the prewar level.

Up to the end of 1916, the inventory increase almost exactly paralleled the advance in the price level, but during 1917 and 1918, and again during 1920, the increase was decidedly greater than that in prices.

The rapid increase in prices after 1916 not only failed to expand production (there was even some decline according to the available indexes) but evidently encouraged the increasing of inventories, thus actually slackening the flow of goods into the hands of consumers.

The inventory advance from 1913 to 1916 was greatest in the railroad equipment, rubber, and chemical groups; from 1916 to 1918, in the meat packing, paper and printing, and automobile groups; and from 1918 to 1920, in rubber, automobiles, and oil.

After '20

The deflation after 1920 was greatest in the rubber, foods, and meat packing classifications.

The peak inventory for most groups was reached in 1920. Exceptions were: 1918, steel and railroad equipment; 1919, consumers' goods, meat packing, and tobacco; and 1021, paper, printing, and publishing.

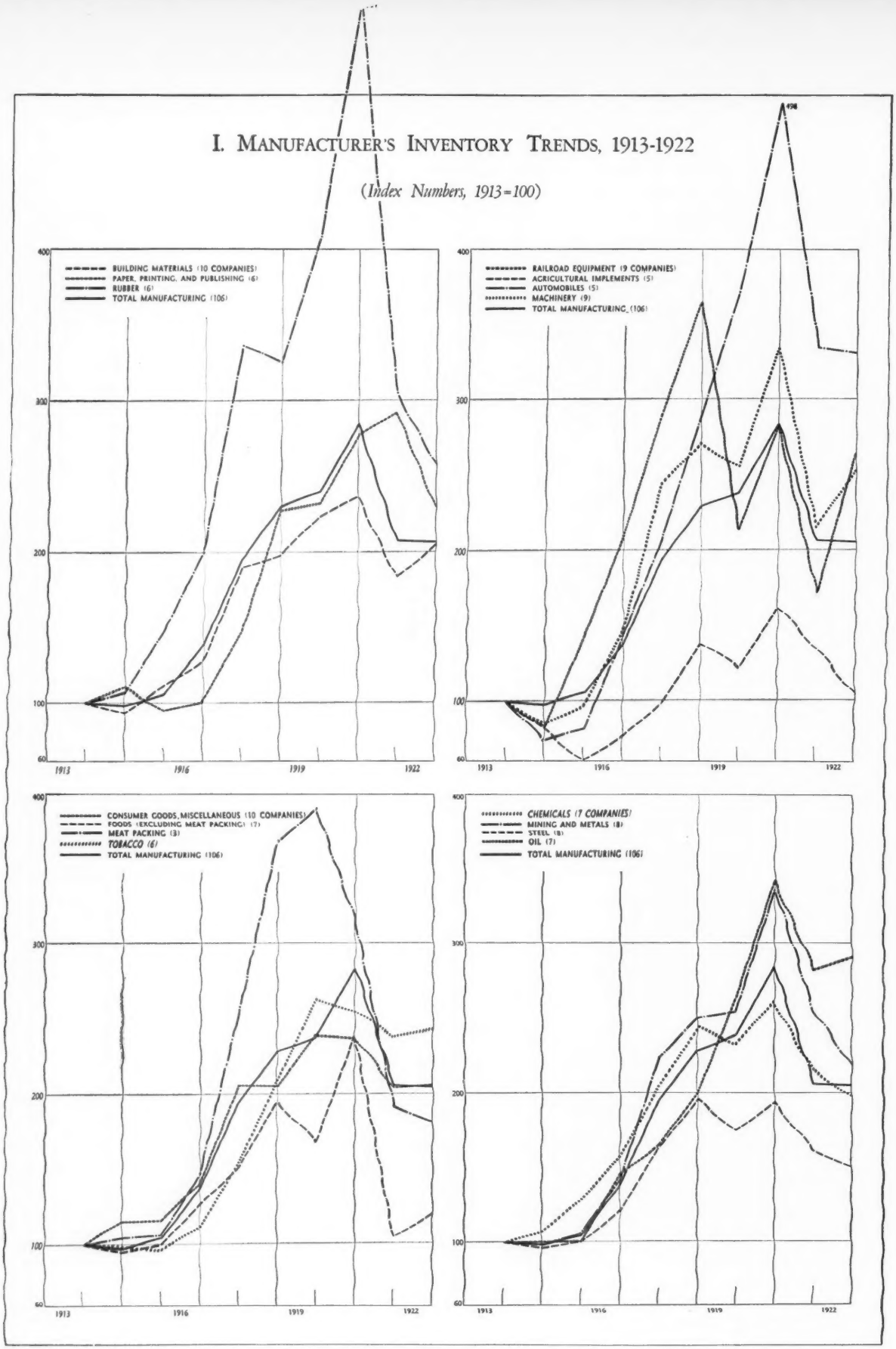
Steel inventories lagged noticeably behind sales, but inventories were above sales after 1914 in electrical manufacturing, rubber (except 1918 and 1922), and distribution. The divergence for these three groups was marked in 1920.

Inventories in mass distributors' hands accumulated throughout the period more rapidly than inventories in manufacturers' hands, and more rapidly than distributors' sales.

These conclusions are based on an examination of the balance sheet records of 111 large corporations, as reported in Moody's Manuals, for the ends of the years 1913 through 1922. Only those companies were included where a consistent record of inventories could be obtained for the entire period. Where an important merger was in-

I. Manufacturer's Inventory Trends, 1913-1922

(Index Numbers, 1913=100)



volved, the company was included only if data were available for the earlier component parts. The 106 corporations, which are manufacturing and mining enterprises, are estimated to represent between 20 and 25 per cent of the total manufacturing picture, so the sample is extremely significant.

One question which must be faced is whether or not such a group of large corporations can be regarded as typical of all enterprise. The answer probably is that there may have been considerable deviation among smaller companies, but at least the sample here presented is significant in its own right. In no one year was the total inventory of these companies less than one billion dollars, and it exceeded three billion dollars in 1920.

The Ten Biggest

Furthermore, an examination of the ten largest companies compared with the rest of the group indicates that an index number for the ten largest would fall slightly below that for the balance of the companies. Also, the changes in the two indexes are always in the same direction.

In obtaining the general index, the manufacturing corporations were divided into fifteen classifications. Group indexes were then combined both on a weighted and unweighted basis, with surprisingly similar results. The difference in no year exceeded 2 per cent. The various group indexes and the weighted index for all groups are shown in chart I.

It must be remembered that index numbers for all groups are started on an even base at the end of 1913. Business had been declining for some months, but it is doubtful if inventories had been liquidated very thoroughly or equally. Nine of the fifteen groups declined during 1914 and three groups, agricultural implements, paper and printing, and tobacco, recorded their lowest points at the end of 1915. The group which seems most likely to have been unusually low at the end of 1913 is consumer goods, miscellaneous, which advanced 16 per cent by the end of 1914, chiefly owing to the behavior of the textile members of the group.

The general index shows a decline in 1914 and then an accelerating rate of increase in the value of inventories until the end of 1917. The rate of advance slackened in 1918 and was even less rapid in 1919. In 1920 the advance was resumed, and the peak for most groups was attained in that year. The year 1921 witnessed a curtailment in the value of inventories by about 27 per cent, and the level remained practically unchanged in 1922.[1]

This general pattern was by no means followed uniformly by the various industry groups. In some instances, notably automobiles, oil, and rubber, a strong underlying upward trend during the period explains considerably the high levels reached. In other instances,

I. Manufacturers' Inventories in Four Periods

(Percentage changes in inventories' value)

Industry	Pre-War 1913-1916	Industry	War 1916-1918
Railroad Equipment	+108	Meat Packing	+150
Rubber	+ 99	Paper, Printing, and Publishing	+126
Chemicals	+ 58	Automobiles	+102
Meat Packing	+ 47	Tobacco	+ 87
Machinery	+ 47	Machinery	+ 85
Oil	+ 45	Agricultural Implements	+ 82
Automobiles	+ 42	Mining and Metals	+ 76
Mining and Metals	+ 42	Railroad Equipment	+ 75
Consumer Goods, miscellaneous	+ 41	Rubber	+ 63
Building Materials	+ 37	Steel	+ 61
Foods	+ 26	Foods	+ 55
Steel	+ 21	Chemicals	+ 55
Tobacco	+ 12	Consumer Goods, miscellaneous	+ 45
Paper, Printing, and Publishing	0	Building Materials	+ 44
Agricultural Implements	— 24	Oil	+ 38

Industry	Boom 1918-1920	Industry	Recession 1920-1922
Rubber	+ 74	Tobacco	— 5
Automobiles	+ 73	Railroad Equipment	— 6
Oil	+ 71	Building Materials	— 13
Mining and Metals	+ 33	Consumer Goods, miscellaneous	— 14
Machinery	+ 24	Oil	— 15
Foods	+ 23	Paper, Printing, and Publishing	— 18
Paper, Printing, and Publishing	+ 23	Steel	— 23
Tobacco	+ 22	Chemicals	— 24
Building Materials	+ 19	Machinery	— 25
Consumer Goods, miscellaneous	+ 16	Automobiles	— 34
Agricultural Implements	+ 16	Mining and Metals	— 35
Chemicals	+ 7	Agricultural Implements	— 36
Steel	— 1	Meat Packing	— 42
Meat Packing	— 14	Foods	— 50
Railroad Equipment	— 23	Rubber	— 55

[1] Dr. Simon Kuznets has made inventory estimates for the years 1918 to 1933 inclusive (*Commodity Flow and Capital Formation*, Simon Kuznets, National Bureau of Economic Research, New York, 1938). His estimates are based on samples of firms taken from Moody's Manuals, for which he could get both sales and inventory figures for pairs of years. Ratios of inventory to sales were developed for ten manufacturing groups and applied to estimates for total sales to obtain estimates for total inventories.

The principal differences in results are that the main increase from 1918 to 1920 is placed by Kuznets in the first of the two years, and by the Dun & Bradstreet index in the latter year; and that the Kuznets' estimates show a large increase in 1922, while the new index shows little change.

A considerable part of the difference is in the greater weight given to textiles in the Kuznets' sample, coupled with the fact that his estimates for textiles declined in 1920 and then went on to new highs in 1921 and 1922. However, even within the groups which should be fairly comparable, rubber and chemicals, for example, it is clear that quite different results are obtained by using inventory figures of a sample directly, from those obtained by applying turnover figures of a sample to known sales figures.

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such as railroad equipment, inventory consists almost entirely of goods in process, and an inventory increase is an automatic result of increased orders.

For the purpose of analysis, the inventory changes have been calculated for four periods (table I). The pre-war years saw the greatest advance in railroad equipment, although it should be noted that inventories in this case are relatively unimportant in the total. The advance in rubber and in chemicals during these years is also worthy of note. By the end of 1916, only three groups had not shown an increase of at least 20 per cent over 1914.

During the war years, the value of inventories in meat packers' hands increased more than for any other group, with paper and automobiles also recording more than a doubling in the two years. The 1918 to 1920 boom saw the greatest accumulations in rubber, automobiles, and oil, with the war industries, chemicals and steel, near the bottom of the list. Although inventories for six groups declined in 1919, meat packing was the only group to record any appreciable reduction during 1920. And the recession witnessed the greatest reductions in foods and rubber. The outstanding impression created by this evidence is the extreme variety of behavior among the different groups. Even the peak periods are different, with but nine of the fifteen recording their maxima at the end of 1920.

Some idea of the degree of uniformity in the direction of change, nonetheless, is given by the following table:

YEARLY CHANGES IN MANUFACTURING INVENTORIES, 1914-1922

(Advances and declines in comparison with previous year)

YEAR	NUMBER OF INDUSTRIES — Groups Advancing	Groups Declining
1914	6	9
1915	11	4
1916	15	0
1917	15	0
1918	13	2
1919	9	6
1920	12	3
1921	1	14
1922	7	8

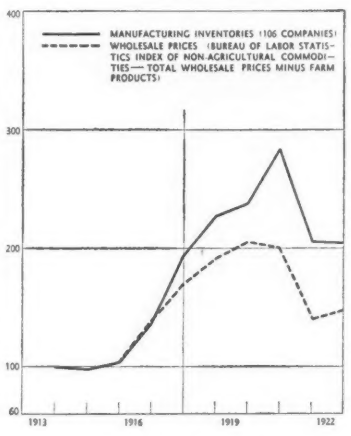
Of course, the major contributing factor to the rise in the value of inventories was the advance in prices. Since inventory consists of raw materials as well as finished product, and since there are several accounting methods which may be used in evaluating any given inventory, one cannot feel very confident of any price index as a perfect measure of the price factor. However, as a rough indicator, chart II compares the manufacturing inventory index with the Bureau of Labor Statistics' Index of Wholesale Prices of Non-Agricultural Commodities, an index excluding the farm products group. Price indexes for the last quarter of each year have been chosen as providing the best comparison.

The price index almost exactly parallels the inventory index from 1913 to the end of 1916. However, at that point they part company. From 1916 to 1918, prices advanced 38 per cent, but inventories jumped 66 per cent. In the post-war boom, the discrepancy was even greater; prices started down in the Spring of 1920, but inventories continued to mount. The price increase from the end of 1918 to the end of 1920 was 5 per cent; while inventories advanced 25 per cent. The decline in the two from the end of 1920 to the close of 1922 was about equal, prices declining 26 per cent and inventories 28 per cent.

It is possible that the above comparisons understate the rôle played by prices

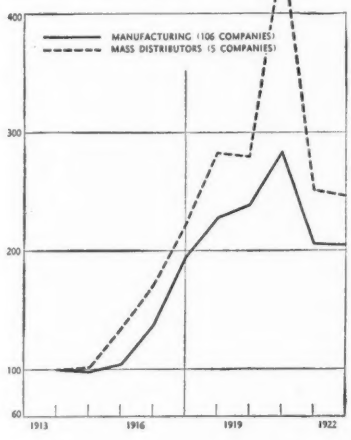
II. MANUFACTURING INVENTORIES AND WHOLESALE PRICES

(Index numbers, end of year, 1913 = 100)



III. MANUFACTURING AND DISTRIBUTION INVENTORIES

(Index numbers, end of year, 1913 = 100)



in the trend of inventory values, if a considerable part of the inventory was in raw material form. Raw material prices advanced more in 1916 and 1917 and fell more rapidly in 1920 than did prices of finished goods. However, even under the extreme assumption that the inventories were all raw materials, it still would be true that the increase from 1917 on cannot be explained entirely by price trends.

Chart III shows an index of mass distributors' inventory based on the record of five corporations, of which two were mail-order houses and three chain distributors. When compared with manufacturing it is clear that the accumulation of inventory in these retailers' hands, 1913 to 1916, was much more rapid than in manufacturing (71 per cent increase as against 37 per cent).

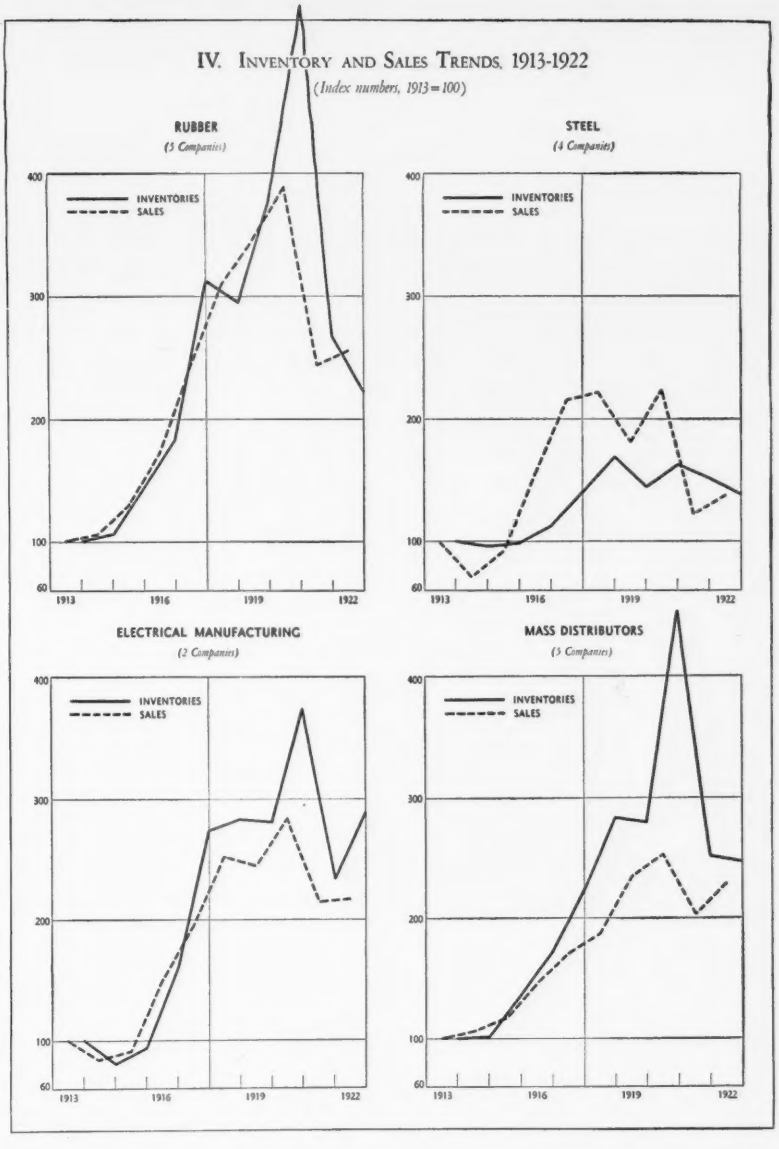
Farm Market

However, it must be kept in mind that mass distribution was developing rapidly at this time, and that the farm market reached by the mail-order houses was the first to be strengthened by war demands. From 1916 to 1918, the two advanced by almost exactly an even percentage. In 1919, while manufacturers' inventory increased, that of retailers actually fell. But data at the end of 1920 reveal that the tremendous price boom of 1919 and 1920 had either deceived retailers much more than manufacturers, or else that retailers could not make adjustments as quickly. During the one year, 1920, manufacturers' inventory increased 19 per cent while retailers' advanced 62 per cent. And the recession left mass distributors' inventory decidedly above that of manufacturers.

If the mass distributors' inventories are compared with their own sales (chart IV), the contrast is also evident. The growth factor is clear. Although the post-war price level was about 48 per cent higher than the pre-war level, sales at the end of the period were more than double those of the pre-war point, which may help to explain the high level reached by the inventory

IV. Inventory and Sales Trends, 1913-1922

(Index numbers, 1913=100)



trend. It is interesting to note, however, that except for 1919, inventories advanced much more decisively than did sales.

Sales

In only a few scattered cases were figures available for both sales and inventories. The records for four steel corporations, five rubber companies and two electrical manufacturing companies (part of the machinery group) are given in chart IV. The contrast in pattern is evident. The demand for steel was so persistent that inventories were never able to accumulate, and the index probably represents chiefly the reflection of prices on goods in process. On the other hand, in the case of rubber, where the raw material skyrocketed in price, the value of inventory was always above sales (except in 1918 and 1922). The increase in inventory was particularly great in 1919 and 1920. Similarly, the inventory of the electrical manufacturing companies moved up

more than sales, particularly in 1917 and again in 1920.

On the basis of the statistical materials now available it is possible to draw a rough sketch of the war period. It is clear that various sections of the business world behaved very differently and yet a picture can be drawn in broad outline. Production advanced under the stimulus of war until the economy was operating very close to capacity in 1916. From that time on all the indicators of business activity show no further gain but, if anything, some failure to maintain the 1916 levels. However, purchasing power was flooding into the markets through foreign, domestic, and Government demand, all supported by a tremendous expansion in the credit structure. The pressure of this demand against capacity operation led to a strong upward movement in commodity prices.

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Actual Increase

The new light on the pattern introduced by the above survey is that, coincident with this upward swing in prices, it became attractive to hold inventories. The inventory index which had been moving parallel to the price index, advanced with sufficient sharpness to indicate an actual increase in physical inventories. This suggests at least the possibility that the advance in prices, one function of which is to increase the flow of goods, may have set in motion at least one offsetting influence in the encouragement of inventory speculation.

Post-War Pattern

One further point needs to be emphasized, namely, the post-war pattern. It is now quite clear that in 1920 the consumption of goods fell off more sharply than their production. Business was slow in making its adjustment and the net result was the piling up of inventories to a peak at the end of 1920. It should at once be obvious that this accumulation of goods must in itself have contributed to the severity of the decline and the resultant inactivity in 1921. This is a familiar pattern; it appeared in 1929, when the productive machine kept on piling up goods for many months after the new orders had declined.

It is doubtful if this would happen in the same degree if the business community were more quickly aware that inventories were accumulating. It is a sad commentary that not until the question was raised by World War II, did anyone make any effort to uncover the experience of World War I—information twenty years too late to influence business policy of that time.

II. Dollar Values and Index Numbers of Inventories Held by 106 Manufacturers and 5 Mass Distributors during the World War Period

Millions of Dollars										Industry Group (Number of Companies in Parentheses)	Index Numbers, 1913 = 100 (Unweighted)									
1913	*1914*	*1915*	*1916*	*1917*	*1918*	*1919*	*1920*	*1921*	*1922*		*1913*	*1914*	*1915*	*1916*	*1917*	*1918*	*1919*	*1920*	*1921*	*1922*
126	101	77	96	123	175	154	203	170	132	Agricultural Implements (5)	100	81	61	76	98	139	122	162	135	104
52	38	42	74	106	148	191	257	172	171	Automobiles (5)	100	74	81	142	205	287	371	498	334	331
18	17	19	24	33	35	39	42	32	36	Building Materials (10)	100	93	110	137	188	197	222	235	182	204
30	33	39	48	62	74	70	78	65	59	Chemicals (7)	100	108	129	158	205	244	233	260	215	197
56	66	66	80	116	116	136	135	116	116	Consumer Goods, Miscellaneous (10)	100	116	117	141	206	205	240	238	205	206
37	35	37	46	56	72	62	88	38	44	Foods (7)	100	96	100	126	151	195	168	239	104	120
84	72	82	124	206	228	214	282	182	212	Machinery (9)	100	85	97	147	245	271	254	334	216	252
101	105	108	148	255	371	395	319	194	184	Meat Packing (3)	100	104	107	147	252	368	391	315	192	182
36	35	38	51	81	90	92	120	92	78	Mining and Metals (8)	100	98	106	142	223	250	254	333	254	217
108	108	108	156	178	215	283	369	305	312	Oil (7)	100	100	100	145	165	199	262	341	282	289
15	16	14	15	22	33	34	41	43	34	Paper, Printing, and Publishing (6)	100	109	95	100	147	226	230	276	292	228
32	26	45	66	93	116	68	90	55	84	Railroad Equipment (9)	100	82	143	208	291	364	214	282	172	264
57	60	84	113	191	184	232	321	172	146	Rubber (6)	100	105	147	199	336	324	408	564	302	257
223	213	224	271	364	436	389	431	363	335	Steel (8)	100	96	100	121	163	195	174	193	162	150
109	108	106	122	168	228	288	278	261	265	Tobacco (6)	100	99	97	112	154	209	264	255	239	243
1,084	1,033	1,089	1,434	2,054	2,521	2,647	3,054	2,260	2,208	Total Manufacturing (106)	100	95	100	132	189	233	244	282	208	204
38	38	51	64	83	106	105	170	94	93	Mass Distributors (5)	100	101	135	171	222	283	279	452	251	247
											*(Weighted Index)**									
										Total Manufacturing (106)	100	98	104	137	194	228	238	284	206	205

* The weights used are rough estimates of the relative importance of inventories based upon the records of the Census of Manufactures, 1937, with allowances for varying rates of growth in different industry groups. The major effect of the weights is to increase the Consumer Goods Miscellaneous, Machinery, Mining and Metals, and Building Material groups; and to reduce the importance of Steel, Agricultural Implements, Tobacco, and Oil in the total. The weights used, applied to the index numbers for each group, are: Agricultural Implements, 3; Automobiles, 6; Building Materials, 6; Chemicals, 6; Consumer Goods Miscellaneous, 15; Foods, 12; Machinery, 12; Meat Packing, 3; Mining and Metals, 6; Oil, 6; Paper, Printing, and Publishing, 3; Railroad Equipment, 1; Rubber, 3; Steel, 15; Tobacco, 3.

EWING GALLOWAY

LEAN YEARS FOR THE RAILROADS

LESTER VELIE
Financial Editor, The Journal of Commerce

THE CURRENT business upturn, which provides a happy interlude in nine lean years of railroading, tends to obscure for the moment what had become increasingly apparent prior to September; namely, that the railroads, over the long term, are obtaining less and less of the nation's available transportation business.

At a time when the Federal Reserve Board index of industrial production is flirting with 1929 levels, this relative loss of traffic is likely to be overlooked, since it is the railroads that profit most from the feverish activity in coal, steel, and other heavy industries that flourish in the initial upswing stages. When near-capacity in the heavy industries slackens, however, it should again become clear that the distemper which has long sapped the vitality of the railroads cannot be remedied by more active business alone—or can be remedied at least by nothing short of the current brisk activity. The point is, there are now more transportation mouths to feed. We have more trucks, boats, pipe lines, more air transport. And, as they grow lustier, they gobble more of the traffic.

The extent of traffic diversion from the railroads and its implications are now coming to be fully grasped. Recent disclosure by the Interstate Commerce Commission, for example, that motor carriers under its jurisdiction grossed $700,000,000 in 1938—roughly 25 per cent of the freight revenues realized by the railroads last year—jarred the railroad and railroad investment community considerably. The 39,000 interstate carriers which gleaned these revenues did not include strictly intrastate haulers, who took in about $800,000,000 more.

Estimates within the railroad industry are even gloomier. The Western Association of Railroad Executives figured on the basis of 1936 data that for-hire trucks of that year grossed $1,930,000,000; and the Association of American Railroads, which has launched a research project to determine the nature and extent of diversion by motor carriers, predicts it will find that the diversion exceeds even this startling amount.

This diversion is, of course, part of a larger picture of fundamental economic change: relocation and decentralization of industry, which places plants nearer markets, shortens the haul, and gives the motor carriers their chance; growing networks of hydroelectric power and natural gas, with the consequent decline in the use of bituminous coal hauled on the rails; decline in economic importance of such old mainstays as anthracite coal and lumber; growth of the pipe line and its penetration of the gasoline fields.

Thus, while the railroad still predominates, its share of the total freight traffic has declined gradually but continuously. Consider the percentage distribution of intercity freight handling by the six principal commercial transportation agencies:

PERCENTAGE OF FREIGHT TON MILES HANDLED

	1926	1937
Steam railways	75.4	64.6
Intercity trucks	3.9	7.7
Great Lakes	15.2	16.6
Other inland waterways	1.6	3.
Pipe lines	3.7	8.0
Airways	.2	.1

Now compare again the freight ton miles handled by the several agencies in 1937 with 1926:

CHANGES IN 1937 TON MILES HANDLED COMPARED WITH 1926

	Amount 000 omitted	Per Cent
Steam railways	—84,628,245	— 18.9
Intercity trucks	+19,850,000	+ 84.4
Great Lakes	+ 3,206,167	+ 3.6
Other inland waterways	+ 7,340,066	+ 76.9
Pipe lines	+23,093,161	+106.4
Airways	+ 2,156	+100.

It is clear that something has happened and continues to happen to the railroads which requires reorientation of management thinking in regard to policies that worked so well in the happier, pre-war monopoly days but are now found wanting.

The point is that returning prosperity alone will not mend the railroads' declining fortunes. To understand why, it is helpful to study the downward course of the various important classes of railroad freight.

Manufacturers

Most important, revenue-wise, of the six classifications into which railroad tonnage is divided is that of Manufacturers and Miscellaneous. In 1938 fully 36 per cent of total rail freight revenues were derived from this source.

In 1928 the railroads reported $1,641,000,000 of revenues from Manufacturers and Miscellaneous. By 1937-1938 these revenues had declined to an average $1,227,000,000. Had revenues maintained the relation to production prevailing in 1928, revenues in 1937-1938 would have averaged $220,000,000 more than were actually reported.[1] The estimated $220,000,000 of profitable traffic, which the railroads lost, obviously was split among the railroads' several rivals.

Among the most important items in the foregoing classification are petroleum and petroleum products. From these the railroads have long derived substantial revenues. But the railroads' hold on the business is slipping. Although 1938 production of petroleum and petroleum products topped that of 1928 by 33 per cent, rail revenues were down 40 per cent. From $356,600,000 in 1928, revenues had shrunk to $211,200,000 in 1938.

The villain in the piece (for the railroads) is the pipe line. Introduced three-quarters of a century ago in Pennsylvania to transport crude oil in competition with teamsters, the pipe line today has blossomed into a 110,000-mile network through which pulse (at rates substantially below those of the rails) 69.3 per cent[2] of crude oil produced in the United States. The rails, on the other hand, transport a negligible 2 per cent, originating from new wells which pipe lines have not as yet reached, from miscellaneous shipments, and from wells whose sparse output renders the pipe line uneconomic.

The showing of the railroads once was happier. In 1925, the rails were originating 9½ per cent of the total production. In the 1931-1937 period, while the quantity of crude oil originated by the pipe lines was increasing 81 per cent, that of the Class I railroads was shrinking 44½ per cent.

The growth of the pipe line for the transportation of crude had a dele-

[1] This is an estimate obtained by projecting into 1938 the ICC estimates of potential railway tonnage for 1928-1937.

[2] As of 1937.

On both edges of the Hudson, locomotives tow their freight, but not so much as they might; on the water and on roads nearby travel barges and trucks, competing carriers.

CHARLES PHELPS CUSHING

terious effect upon railroad revenues from two points of view. Besides depriving the rails of traffic from the wells, it encouraged the removal of the refineries from the production areas nearer to the markets for petroleum products and so shortened the haul for refined products. The crude from the mid-continent area, for example, is now piped to the refineries near the big consumption centers, and refined products are moved by rail generally less than 450 miles. Shortening of the haul for refined products has, of course, created fat pickings for the motor carriers, and they have not been slow to seize the opportunity.

But the railroads' cup apparently is not yet full. And it remains for the young and pushing gasoline pipe line to fill it overflowing. It was bad enough for the railroads when the gasoline pipe line was used only for moving oil and gasoline to tidewater shipping terminals. It became decidedly worse nine years ago when the petroleum industry began to use the pipe line to distribute gasoline to markets. Shipping of gasoline by pipe line was begun early in 1930 by the Tuscarora Oil Co., Ltd., which owned a line extending from the refineries of the Standard Oil Co. of New Jersey, the parent company, to a point in western Pennsylvania. Others soon followed, linking refineries in Oklahoma and Kansas with important centers including Chicago, Milwaukee, and St. Paul.

Once launched, the growth of the gasoline pipe line continued unbroken even through the lean depression years. In 1931 the percentage of gasoline transmitted by pipe lines was 4.77 of that originated by the railroads. In 1937 it had grown to 21.28 per cent. In the 1931-1937 period, the quantity of gasoline originated by pipe lines increased 302 per cent. In the same period the quantity originated by the railroads decreased 9.84 per cent.

Preliminary Interstate Commerce Commission data disclose that the onrushing gasoline pipe line did not stop for breath in 1938. While the flow of all petroleum, crude and refined, through pipe lines dropped 9.41 per cent in 1938, the flow of gasoline through pipe lines spurted 5.54 per cent, which spelled out a further diversion of approximately 4,000,000 barrels of profitable traffic from the railroads. This helps explain why revenues from "petroleum, refined, and all other gasolines" declined $6,285,000 from the 1937 revenues. And the end, apparently, is not yet in sight.

Seeping revenues are evident also in another important source of rail traffic, the automobile industry. Production of trucks and passenger cars in 1938 totalled 2,489,635 units as against 4,352,759 units in 1928, a drop of 43 per cent. But revenues from carrying automobiles and related products were down 59 per cent.

Here's why: In 1928 the railroads were hauling 67.8 per cent of passenger cars and trucks produced in that year, with motor carriers hauling 28 per cent and boats 4.1 per cent. By 1932 the rails were hauling 44.6 per cent of the total, while trucks moved 51.6 per cent. The rails slipped farther in 1937, hauling 41.9 per cent as against the 50.9 per cent taken by truck and 7.2 per cent by boat. The picture changed but slightly last year with the rails clinging to 43.6 per cent of the traffic, with the trucks taking 49.1 per cent, and the boats, 7.2 per cent.

Rate War Begins

The heated contest for this business has aroused considerable recrimination between the railroads and the truckers, and last Fall rail managements turned on their tormentors, slashing rates on automobiles moving from Detroit east to the seaboard. The ICC intervened and suspended the rates, thus nipping an incipient, costly rate war. The truckers' foray upon rail carloadings of automobiles apparently has continued this year with unabated vigor.

For example, organized truckers, reporting traffic to the American Trucking Association, disclosed that their loadings of automobiles and trucks rose 49 per cent in January over the similar 1938 month, rose 70 per cent in February, 91.9 per cent in March, 51.6 per cent in April, and 56 per cent in May (despite the Briggs strike).

This constituted an average 63.7 per cent increase in motor carrier haulings of automobiles for the first five months of the year. The increase in automobile production for the first five months was

PRODUCTION OF COAL, OIL, AND WATER POWER, 1918-1937*

(Indexes, 1918 = 100)

YEAR	Penn. Anthracite	Bituminous Coal	Total Coal	Petroleum Total Domestic Crude	Natural Gas	Total Natural Gas Petroleum	Water Power
1918.....	100	100	100	100	100	100	100
1928.....	76	86	85	253	218	241	232
1929.....	75	92	90	283	266	274	230
1932.....	50	53	53	221	216	212	227
1936.....	55	75	72	309	288	287	270
1937.....	52	76	73	359	326	330	287
PER CENT OF TOTAL BTU EQUIVALENT CONTRIBUTED BY COAL, OIL, AND WATER POWER							
1918.....	12.3	69.5	81.8	9.8	3.6	14.4	3.8
1928.....	8.3	53.2	61.5	21.9	6.8	30.7	7.8
1929.....	7.6	52.8	60.4	22.8	7.7	32.9	7.3
1932.....	7.5	45.	52.5	26.1	9.3	36.9	10.6
1936.....	6.2	47.1	53.3	27.3	9.3	37.4	9.3
1937.....	5.4	45.	50.4	29.8	9.8	40.2	9.4

* *Minerals Yearbook 1938*, Bureau of Mines, United States Department of the Interior.

49 per cent over that of 1938, indicating that the motor carriers were eating further into the rails' share of this business.

The foregoing instances of rail traffic deterioration deal largely with the loss of revenues to competitors. We now come to an instance of what happens to rail revenues when an important traffic-producing industry itself becomes the victim of diversion. The industry is coal, both bituminous and anthracite. Bituminous is an old railroad mainstay, accounting in 1938 for 64 per cent of the products-of-mines revenues, and for 17 per cent of all freight revenues. But bituminous coal has been letting the railroads down, because bituminous coal itself has been losing ground to oil, natural gas, and hydro-electric power.

CHARLES PHELPS CUSHING

Coal dust grimes the skim of snow beside a New York Central train at West Albany; and whether people ride or not, the train must move or rust.

The Bureau of Mines disclosed in its latest annual study of the relative rate of growth of coal, oil, and water power that 1937 production of bituminous was 24 per cent below the 1918 level; that Pennsylvania anthracite was 48 per cent below the 1918 production. Petroleum production, however, had advanced 359 per cent since 1918, natural gas 326 per cent, and water power 287 per cent.

The table on the preceding page gives a swift picture of what has been happening to an old friend of the railroad industry.

Coal, which moves in carload lots at a low rate per ton mile, has declined in importance. The downhill course of anthracite has pushed a number of the industry's one-time stronger systems to the brink of bankruptcy.

Thus, rail revenues from bituminous coal in 1938 and 1937 averaged $562,600,000 as against $785,500,000 in 1928. To the mischief done by the secular deterioration of the coal industry must be added as well the inroads of competitors. For even in the hauling of coal, about one-third of the loss could be ascribed to causes other than the decline of production.

In agricultural products, too, and in the related animals and products classification, the railroads' position has been substantially undermined. Production of agricultural products in 1937-1938 averaged 15 per cent below that of 1928, but hauling of agricultural products by the railroads had slipped 22 per cent, and revenues declined $233,000,000, or 31 per cent.

The railway traffic in animals and products (which includes cattle and hogs, poultry and dairy products) suffered even more in the 1928-1938 period. Although production in 1937-1938 averaged 1 per cent higher than in 1938, the average railroad tonnage of animals and products during 1937-1938 was down 42 per cent. Thus the 1928 revenues of $242,600,000 had shrunk to an average of $157,900,000 in 1937-1938.

Another Loss

Had tonnage held the 1928 relationship to production, the roads would have gleaned an average $108,600,000 more than they actually did in 1937-1938. Again the truckers crowded out the rail carriers. Oddly enough, trucks nabbed this traffic despite the higher truck rates on livestock, indicating considerations of speed and facility of handling played a part. In any case, the trucks, which were accounting only for 5.2 per cent of livestock hauling in 1920, had cornered 54 per cent of the traffic by last year.

Before leaving the agricultural products and animals classifications, it is interesting to observe the career of two items—cotton and milk.

In 1937 cotton traffic was down 44 per cent from 1928 despite the 8 per cent bulge in production over the latter year. Relocation of the textile industry from New England to the cotton-growing States was an outstanding economic factor. Whereas 56 per cent of the cotton used in America was consumed in cotton-growing States in 1920, by 1938 fully 85 per cent was being consumed in the cotton-growing areas. Removal of mills to the centers of cotton production, of course, gave rise to the direct delivery of cotton by truck.

A word about milk: In 1933 the Federal Co-ordinator of Transportation disclosed that the railroads hauled 3,000,000 tons of milk and cream, about 6 per cent of the production for that year. In 1937 production of milk was up 4.20 per cent in comparison with 1929. Rail revenues, however, had plummeted 66.2 per cent. To the in-

dustry as a whole the item is of minor consequence, but it provides an instance, although an extreme one, of what is happening to the railroads.

Space does not permit an extensive recital of railroad freight deterioration, but the story is incomplete without a reference to the course of less-than-carlot freight. The railroads are at their best competitively in the hauling of long-distance, carload shipments. They are most vulnerable in the movement of packaged goods and other items which make up in less than car lots and which require pickup and delivery service. Thus, less than car-lot shipments had already declined substantially in 1928 after achieving a peak in 1920. By 1937-1938, revenues from this source were averaging $251,300,000 as against $512,500,000 in 1928. Had less than carload shipments kept pace with the level of general business, the railroads would have realized during 1937-1938 approximately twice the revenues they actually obtained.

Truck Competition

Although relocation of key merchandise warehouses nearer large markets and the consolidation of less-than-carload shipments into carload lots by forwarders played important rôles, the principal explanation for the swift shrinkage in less-than-carload rail shipments is the competition which has come from the motor truck carriers.

A glimpse at what has been happening in regard to this classification this year is illuminating An approximation of the diversion that is going forward can be obtained by comparing truck tonnage figures of the American Trucking Association with railroad data on less-than-carload merchandise traffic and miscellaneous freight loadings. The comparison is summed up in the following table:

COMPARISON OF GAINS MADE BY RAILROADS AND TRUCKS IN LIGHT FREIGHT TONNAGE*

(Percentage increases, month by month, from the year before)

1939 Month	Railroads *Percent Increase*	Trucks *Percent Increase*
October	0.03	25.6
September	2.9	28.2
August	2.9	24.7
July	3.7	21.7
June	3.7	26.2
Average	2.64	25.2

* For railroads, less-than-carload and general merchandise loadings; for trucks, total tonnage reported to the American Trucking Association.

The May report of tonnage, by the way, indicated the heaviest movement of revenue freight by motor trucks in any single month since January, 1937, when the association began computing national truck-loading averages. In any case, it can be seen that the railroads' recovery from the 1938 traffic slump was at a substantially lower rate than that of the truckers.

All of the foregoing dolorous recital of what has happened to railroad freight in general and to specific "backbone" items in particular should convince the reader that changes in the nation's economy and the growth of competitive forms of transportation have diverted from the railroads millions of dollars in revenues which no resurgence of industrial activity alone can fully restore.

Estimated Losses

Estimates based on data compiled by the ICC indicate that failure of the railroads to hold the ratio of traffic to production that prevailed in 1928 cost them an average $800,000,000 of revenues during 1937-1938. Loss from competitive rate cuts has cost the railroads at least another $25,000,000, according to the ICC. And had passenger revenues in 1937-1939 remained at the 1928 level instead of dropping to $500,000,000 less, railroad revenues for 1937-1938 would have averaged an estimated $1,325,000,000 more than was actually reported. While this figure does not pretend to indicate the exact loss to the railroads, it affords a fair approximation of what has taken place.

The railroads, of course, are aware of the erosion of their traffic by competi-

Sante Fe's glittering Super-Chief meets the challenge of gasoline with the flowing pace of diesel power.

CHARLES PHELPS CUSHING

tors. But apparently the awareness has come somewhat belatedly; only recently have the carriers begun to clamor against the allegedly unfair advantages enjoyed by their rivals in the struggle for traffic.

The railroads contend, for example, that while they have to build, maintain, and pay taxes on properties which they use, the motor carriers enjoy what amounts to substantial subsidies by paying less than their full share of highway costs. And the same can be said of the inland water carriers.

The railroads' contention is supported by W. M. W. Splawn, who last Fall, when chairman of the Interstate Commerce Commission stated, "trucks now swarm over thousands of miles of new highways for which State and local governments are heavily in debt. They are not getting in taxes from the vehicles anything like enough to keep up the roads and retire bonds issued in building the highways."

Consequently, in the recommendations of the Committee of Six, named by President Roosevelt to suggest a program of remedial rail legislation, the rail managements suggested that the "situation between all modes of transportation be equalized . . . so as to provide a fair field for all and special favors for none." Collaterally, the railroads demanded a national transportation policy providing for regulation that would preserve the "inherent advantages of each."

It should be pointed out that under the Motor Carrier Act of 1935, the interstate highway carriers are now subject to the same sort of regulation imposed upon the railroads. Intrastate regulation also is catching up with those truckers who ply their trade within the borders of one State, and competitive rates gradually are pushing forward. However, a national transportation policy implemented by machinery to equalize competition would, in the long term, alleviate, to some extent, the railroads' plight.

No Certain Cure

But that it will by itself cure the deep-rooted illness of the railroads is by no means clear; and, if European experience can serve as a guide, it will fall somewhat short. Dr. Leopold Heinemann, former advisor to the Central Administration of German National Railways, points out that when Germany introduced special licenses for (container) service trucking, requiring special operating permits for every truck operated, service trucking was ruined; but the railroads did not profit. Private shippers bought trucks of their own, and finally the service truck license law was repealed. Similarly, when trucks were forbidden to canvass for back freights in a number of European countries, Dr. Heinemann reports "it did not take long until storehouses which negotiated freights for truckers were opened . . . trucking companies pooled their vehicles; truck terminals were opened all over Germany, England, and in many other European countries. The railroads' share in those enterprises was considerable. But overhead expenses turned rail earnings into losses."

To men moving at rapid speeds, the lone railroad switchman gives direction, and the benediction of safety.

R. I. NESMITH & ASSOCIATES

While the foregoing European experience does not mean that attempts to equalize competition should be abandoned, it does indicate that drastic curbs on competitors, even if public opinion sanctioned them, probably would provide no solution.

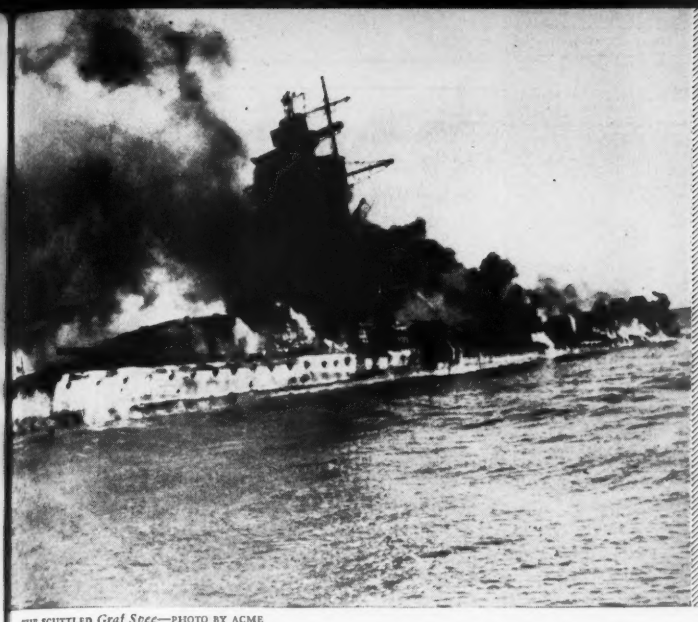
What then can the railroads do?

Solutions advanced in the continuing years of the "railroad problem" vary from demands for practical abolition of all railway regulation to demands for government ownership. It has been variously suggested that the government guarantee rail fixed-debt; that the railroads be subsidized by the Federal Government; that capitalizations be drastically pruned; that "postal passenger rates" be tried; that the roads consolidate, merge, or co-ordinate, and so on.

However much railroad managements may have speculated about it, little is heard from them concerning the need for fundamental recasting of policies to meet a changed railroad situation. From what we have seen of the forces behind declining rail revenues, it would not be wise to expect better times to bail the railroads out; and to be optimistic about future earnings, it has been pointed out, would be about the worst thing that could happen to the railroads now.

(Continued on page 52)

BUSINESS DIARY



THE SCUTTLED *Graf Spee*—PHOTO BY ACME

EVENT OF THE MONTH

On order of Hitler, Captain Langsdorff blows up Admiral Graf Spee, bottled up in Montevideo by British warships. . . . Scuttling of German liner Columbus follows.

DURING THE MONTH

Industrial production index (adjusted) attains new high. . . . Anti-trust building drive brings indictments in eight cities. . . . Americas prepare for stay-at-home tourist trade.

2 NEW YORK CITY opens $40,000,000 North Beach airport. Mexican Supreme Court upholds expropriation of foreign oil properties.

4 SUPREME COURT sanctions Federal prosecution of Chicago milk distributors under Anti-Trust laws; rules ICC can protect workers in rail merger. Motor Carrier Act held illegal by Federal Court.

6 STOCKS stage best rally in nearly two months.

8 CIO auto union heads ban unauthorized strikes.

10 GLASS manufacturers' monopoly charged in Toledo in Federal anti-trust suit.

11 SUPREME COURT, in two decisions, forbids indirect use of wire-tapping evidence in Federal criminal cases. Federal Circuit Court of Appeals in New York overrules NLRB decision that employer may not discriminate in hiring union and non-union employees. House Committee opens NLRB inquiry. TNEC holds first investment banking hearing. Cotton prices reach highest levels since August, 1937.

12 ICC grants two-month extension of 2½-cent rail coach fare in East.

13 COMMODITY prices spurt in heaviest buying since early War boom; wheat hits two-year peak.

14 MULTIPLE-CAR rates for quantity rail shippers approved by ICC, reversing long-established policy. Russia expelled from League of Nations.

15 ATLANTA has red-letter day celebrating premiere of "Gone With the Wind."

17 GRAF SPEE scuttled by Nazis in Montevideo harbor. Atlantic Clipper completes one-hundredth crossing.

21 JOHN W. HANES, Under-Secretary of the Treasury, resigns, effective December 31. Maryland and Michigan circuit courts rule State Fair Trade Laws unconstitutional.

23 PRESIDENT appoints Myron C. Taylor as "peace ambassador" to Pope Pius XII.

25 CHRISTMAS DAY.

26 SUGAR quota system, suspended September 11, re-established by President, operative January 1.

29 MINNEAPOLIS Supreme Court rules U. S. Steel may file single tax return for 90 per cent-owned subsidiaries. Federal Circuit Court of Appeals in Philadelphia holds company unions legal, overruling NLRB. Department of Agriculture suspends export subsidies for wheat and flour (except exports to Philippines). President announces Daniel W. Bell will succeed Hanes as Under-Secretary of the Treasury.

30 CHARLES EDISON named Secretary of the Navy. First of the double New Year's Eves celebrated.

KOPPER'S COKE PLANT, KEARNY, N. J.—MACOMBER FROM NESMITH

THE TREND OF BUSINESS

PRODUCTION . . . . PRICES . . . . TRADE . . . . FINANCE

A slowing-up in business activity follows six months of vigorous recovery. The sluggishness appears in industry, mainly in capital goods lines, and, so far, in orders rather than in production rates. Caution dominates purchasing policies, yet sentiment is for the most part moderately optimistic. Good reports continue to come from retail trade.

ALTHOUGH the level of business activity still rivals the highs of 1937—and in some branches, the all-time peaks of 1929—the trend since the first of the year has been moderately downward.

The tapering-off is reflected principally in a shrinkage of manufacturers' order-backlogs. Industrial production has contracted slightly, much less than is indicated by seasonally-corrected indexes, which are constructed to allow for an expansion at this period of the year. (When plants are already at near-capacity production, some drop in seasonally adjusted indexes for January could logically be expected. The downtrend gains significance this month only because it is accompanied by a noticeable slackening in new buying and by a gradual deterioration in backlogs.)

After a better-than-seasonal record in November and December, employment has also declined. The principal factors have been the post-holiday contraction in trade payrolls and the usual seasonal dullness in agricultural work, with the reduction in factory employment comparatively slight.

Consumer purchasing, nevertheless, stands out as one of the brightest spots in the current picture. Holiday trade totals ranked with the top figures of the past decade. Sales since the first of the year have held up better than usual, and retail stocks of seasonal merchandise are reported to be comfortably low.

Retailers' budgets for Spring generally allow for moderate increases in orders over a year ago. But wholesale buying, like security and raw commodity trading, is currently dominated by an attitude of cautious restraint. Business sentiment, which last September and October was inclined to favor a liberal extension of future commitments, now prefers an "open-to-buy" position.

Industrial activity: Production in December decreased less than was usual for that month and the FRB adjusted index of output reached a new all-time high at 128. Durable goods industries again accounted for the bulk of the improvement. The adjusted index for this group touched a record peak of 140, having advanced from 71 in May. Non-durable manufactures measured 120 in the adjusted index, compared with the 1939 low of 105 in April.

Represented as points in the total index of manufacturing production, durable goods production in December was 65 and non-durable 64. This was the first time since 1920 that the durable goods line crossed the non-durable.

While the production index for December was making a new high, buying activity, particularly in the heavy industries showed a gradual decline—and this decline has continued in January. The machine tool industry operated at 93 per cent of capacity in December; but orders from domestic sources were shrinking, and buying in January was reported under current shipments. Freight-cars ordered in September numbered 24,231 and in December 200. In the steel industry, buying in December was estimated at the rate of 75 per cent of productive capacity and in January at 40 to 60 per cent; production in December averaged 90 per cent of capacity and in the first three weeks of January 86 per cent.

Forward commitments for new construction, as reflected in the volume of building permits, dropped more than seasonally in December, showing a decrease under the previous year for the

first time since July. Contract awards for residential building (F. W. Dodge) were under the like period a year ago for the first time in eighteen months. Orders for heavy electrical goods in November (NEMA) showed the first decline since early Summer, only the industrial material series being higher than in October.

Consumer buying: Retail trade in contrast to the decline in industrial ordering, continues to show an expansionary tendency. As measured by the DUN'S REVIEW index, the volume of purchasing during December was 5 per cent above the previous year, and the largest on record since December, 1936. Rural retail sales were higher by about 12 per cent and city department store sales by approximately 4 per cent. Despite severe Winter weather, which has hindered shopping trips in some regions, preliminary reports for January indicate that the post-holiday lull has been less pronounced than usual and that inventories of seasonal goods have been successfully cleared.

Purchasing power: Consumer income, after seasonal adjustment, has mounted steadily since July, income payments in December being reported approximately 12 per cent larger than in December, 1938, and the highest since October, 1929. While a decline in wage payments is indicated for January, the bulk of this is seasonal. Unadjusted, the index of factory payrolls stood at 103.9 in December, factory employment at 104.0; a year ago these indexes were 87.1 and 94.0, respectively.

Prices: Living costs remain approximately unchanged compared with a year ago, indicating that enlarged incomes have meant equally enlarged purchasing power for consumers. Retail food prices continue well below last year's level. The cost of living index of NICB was 85.3 in December and 85.8 a year ago. In wholesale commodities, the price trend has been generally sideways since October; for the second week of January, the BLS index registered an increase of 3.5 per cent over the previous year, with raw materials up 4.8 per cent, and finished products not more than 2.2 per cent.

Foreign demand, as reflected in merchandise exports, recovered sharply in December after a more-than-seasonal drop in November. Exports were valued at $358,000,000, about 35 per cent above a year ago and the largest monthly total since March, 1930.

New issues: The flow of venture capital into industry remains sluggish, unusually so when compared with previous periods of intense activity in heavy lines. Corporate issues for new capital reported by the *Commercial and Financial Chronicle,* totalled only $26,971,057 in December, compared with a monthly average of more than $100,000,000 in 1936 and 1937 and of more than $500,000,000 in the years 1927 through 1929.

Bank loans: Commercial and industrial loans from banks have increased substantially since June (for member banks in 101 cities the expansion has amounted to approximately $600,000,000), but the aggregate volume of such loans remains only about half the average for the 1920's. While banks report total deposits at a new high level in 1939, the turnover of these deposits in 1939, as measured by the volume of checks drawn against them, was the lowest on record.

Security markets: Stock trading also reflects hesitation on the part of investors. While industrial production began the new year at a level about 25 per cent above a year ago, industrial stock prices, measured by the Dow-Jones index, were fractionally lower. Prices have sagged further in January, with the average of the Dow-Jones index receding to 145.54 in the third week, a new low since the rapid rise in September swept the average up from 135.99 at the beginning to 152.18 at the end of the month.

Industrial Production

Federal Reserve Board Adjusted Index
1923-1925 = 100

	1936	1937	1938	1939
January	97	114	80	101
February	94	116	79	99
March	93	118	79	98
April	101	118	77	92
May	103	118	76	92
June	104	114	77	98
July	108	114	83	101
August	108	117	88	103
September	109	111	90	111
October	110	102	96	121
November	114	88	103	124
December	121	84	104	128

Factory Payrolls

*U.S.B.L.S. Index (Revised)**
1923-1925 = 100

	1936	1937	1938	1939
January	76.9	94.6	75.3	83.7
February	76.6	100.1	77.5	86.0
March	80.5	105.9	77.6	87.6
April	82.6	109.7	74.9	85.5
May	84.0	110.1	73.2	85.0
June	84.2	107.6	71.1	86.9
July	83.5	105.2	71.1	84.4
August	87.3	108.7	77.3	89.7
September	89.2	104.9	81.6	93.8
October	92.9	104.9	84.2	101.6
November	94.4	93.3	84.4	101.8
December	99.2	84.6	87.1	

* Adjusted to Census totals for 1937.

Department Store Sales

Federal Reserve Board Adjusted Index
1923-1925 = 100

	1936	1937	1938	1939
January	81	93	90	88
February	83	95	88	87
March	84	93	86	88
April	84	93	83	88
May	87	93	78	85
June	87	93	82	86
July	91	92	84	86
August	86	93	83	89
September	88	94	86	91
October	90	93	84	90
November	94	91	89	95
December	92	89	89	96

Wholesale Commodity Prices

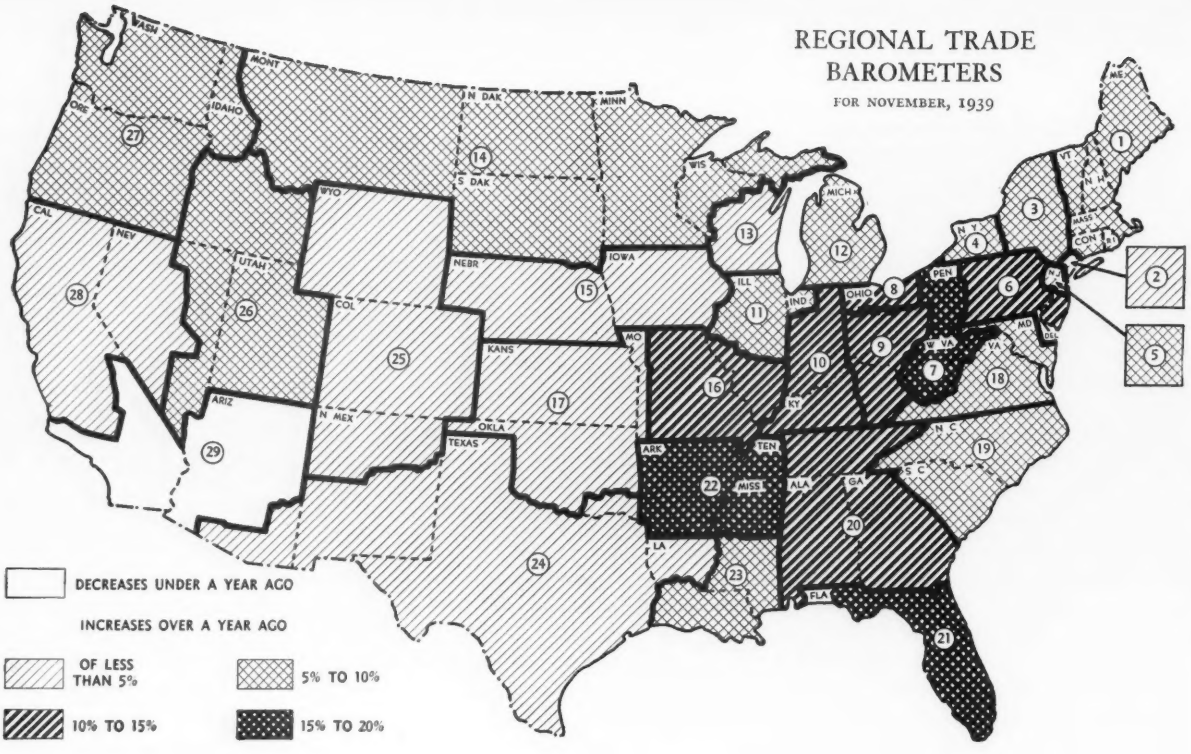
U.S.B.L.S. Index—1926 = 100

Week	Oct. 1939	Nov. 1939	Dec. 1939	Jan. 1940
I	79.0	79.3	78.8	79.5
II	78.9	79.3	79.0	79.5
III	79.4	79.1	78.7	
IV	79.2	79.0	79.3	
V			79.4	

Industrial Stock Prices

Dow-Jones Index (Weekly Average)

Week	Oct. 1939	Nov. 1939	Dec. 1939	Jan. 1940
I	150.43	152.21	147.11	151.88
II	150.62	149.91	147.68	148.45
III	153.19	150.34	148.48	145.54
IV	153.98	150.02	149.30	
V			149.50	



HOLIDAY BUYING BEST SINCE 1936

The United States Trade Barometer rose to 100.4 (preliminary) in December from 96.2 in November. Barometer figures are compiled by Dr. L. D. H. Weld, Director of Research, McCann-Erickson, Inc.; trade information is reported by the branch offices of DUN & BRADSTREET, INC.

THE COLD WAVE which prevailed in many sections of the country during the first part of January proved to be a particularly good prop for retail sales volume. Demand for heavy apparel, galoshes, blankets, and other seasonal items was unusually heavy, and sales totals dropped less than normally from the high volume of holiday purchasing. Results were particularly satisfying in that sales of Winter merchandise had lagged somewhat in the preceding month. Regular January promotions of white goods and home furnishings elicited the customary good response, but strong consumer interest in apparel and sporting goods detracted to a certain degree from the emphasis usually placed on those traditionally active departments.

Wholesale buying gained volume slowly after the year-end lull. Orders of Spring apparel were running well ahead of the similar period last year, as merchants took account of the early date of Easter. Sales as a whole were reported 5 to 10 per cent ahead of the corresponding period of 1939.

A sharp spurt in retail volume during the week before Christmas lifted retail sales for the month of December to a level well above that of the previous year. The preliminary United States Trade Barometer for the month, at 100.4, showed an increase of 5 per cent over December, 1938. In December, 1936, the figure was 101.8, but except for that year, this December's volume of trade was at the highest level since 1929.

Wholesale activity in the last month of 1939 settled into the usual between-season slump. Some fill-in orders were received for gift merchandise, and some goods were moved for the forthcoming January promotions. Distress goods were scarce, however, and price concessions comparatively rare, so that volume for the January sales was not especially heavy.

Most of the barometers for the separate regions for No-

vember show increases over both the previous month and the previous year. In comparison with 1938, the largest gain (about 20 per cent) was recorded in the Pittsburgh region. Increases of more than 15 per cent were also registered in the Atlanta and Birmingham and the Memphis areas. The only region to show a decrease from the previous year's comparative was Los Angeles, where a 1 per cent decline was recorded.

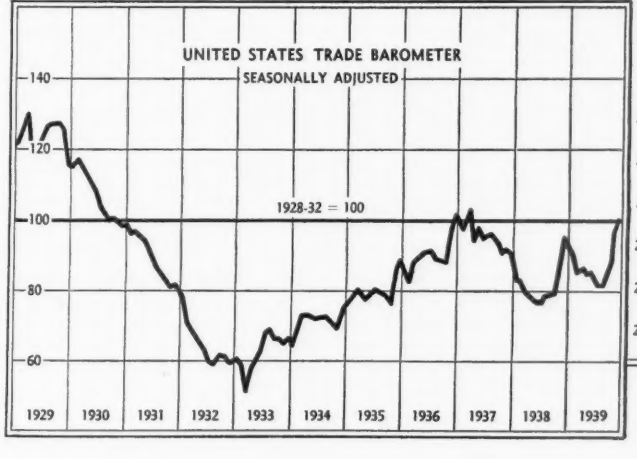
On a month-to-month basis, only four regions failed to score advances; of these, two were steady with the previous month's level, and two were somewhat lower. Declines of 3 and 7 per cent, respectively, were registered in the Cleveland and the Detroit regions. Increases of more than 10 per cent occurred in New England, Philadelphia, Pittsburgh, Maryland and Virginia, Atlanta and Birmingham, New Orleans, and San Francisco. Regions where "no change" was reported were Denver and Salt Lake City.

Trade volume in eleven of the twenty-nine regions during November exceeded the 1928-1932 average. Included were Cincinnati and Columbus, Indianapolis and Louisville, Minneapolis and St. Paul, Texas, and Denver, as well as all of the regions South of the Mason and Dixon line.

THE MAP AND CHART compare the November, 1939, indexes with those for the same month a year ago. The column at the extreme right of the chart indicates the relative importance of the regions: the figures are percentages of national retail trade from the 1935 Census of Business.

THE INDEXES for the regions are charted, with U. S., from 1937, on pages 34-37. They are composites based on: bank debits (Federal Reserve Board), department store sales (Federal Reserve Board), new car registrations (R. L. Polk & Company), and life insurance sales (Life Insurance Sales Research Bureau). In regions 2, 3, 4, 5, and 14, wholesale sales (Department of Commerce), and in region 2, advertising linage (*Editor and Publisher*), which were found to make those indexes more accurate, are included. In region 15, department store sales have been omitted. Each index is separately adjusted for seasonal variation and for the number of business days in each month. All are comparable. The monthly average for the five years 1928-1932 equals 100. The preliminary figure for the United States is computed one month before regional figures are available.

THE PARAGRAPHS printed opposite the 29 regional charts quote figures for November based on samples of department and retail stores reporting to the Federal Reserve banks; for December and for the first half of January based on opinions and comments of business men in various lines of trade, gathered and weighed by the local DUN & BRADSTREET offices.



REGIONAL TRADE BAROMETERS

	REGION	Nov. 1939 Regional Index	Nov. 1939 Compared with Nov. 1938 (%)	Retail 1935 Sales %
			−10 0 +10 +20 +30	
	U. S.	96.2	+ 7.6	100.0
1.	NEW ENGLAND	86.2	+ 5.4	7.8
2.	NEW YORK CITY	79.1	+ 3.1	10.3
3.	ALBANY AND SYRACUSE	96.7	+ 8.8	2.6
4.	BUFFALO AND ROCHESTER	84.8	+ 7.3	1.9
5.	NORTHERN NEW JERSEY	87.3	+ 8.0	2.9
6.	PHILADELPHIA	92.5	+12.4	6.2
7.	PITTSBURGH	98.4	+19.7	3.7
8.	CLEVELAND	96.3	+12.9	2.9
9.	CINCINNATI AND COLUMBUS	106.5	+12.1	3.1
10.	INDIANAPOLIS AND LOUISVILLE	109.8	+10.0	2.6
11	CHICAGO	91.3	+ 7.3	6.4
12.	DETROIT	90.3	+ 8.1	4.0
13.	MILWAUKEE	94.7	+ 2.2	2.2
14.	MINNEAPOLIS AND ST. PAUL	102.5	+ 5.1	4.5
15.	IOWA AND NEBRASKA	77.7	+ 2.4	3.0
16.	ST. LOUIS	97.5	+11.0	2.5
17.	KANSAS CITY	90.8	+ 3.5	3.6
18.	MARYLAND AND VIRGINIA	112.9	+ 9.3	3.8
19.	NORTH AND SOUTH CAROLINA	105.9	+ 9.7	2.1
20.	ATLANTA AND BIRMINGHAM	123.6	+12.4	3.5
21.	FLORIDA	129.7	+15.6	1.3
22.	MEMPHIS	105 4	+16.9	1.5
23.	NEW ORLEANS	106.6	+ 6.2	1.0
24.	TEXAS	112.0	+ 3.6	4.5
25.	DENVER	104.2	+ 2.7	1.3
26.	SALT LAKE CITY	95.8	+ 7.2	.8
27.	PORTLAND AND SEATTLE	93.4	+ 6.5	2.7
28.	SAN FRANCISCO	99.2	+ 2.0	3.4
29.	LOS ANGELES	96.8	— 1.0	3.9

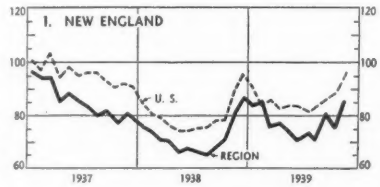
THE REGIONAL TRADE BAROMETERS

These indexes of consumer purchasing are corrected for seasonal variation; the monthly average for the five years 1928-1932 equals 100 (see preceding page). Charts showing the curves since January, 1928, were published in the September, 1939, number and will appear semi-annually. Additional information about the indexes and about their especial usefulness in regional sales quota work, back figures, and data about regional boundaries are available for users of the indexes.

1. New England

NOV., 86.2 OCT., 75.4 NOV. 1938, 81.8

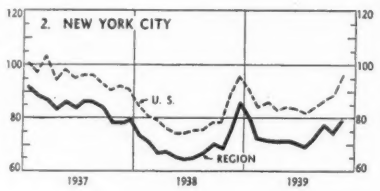
NOVEMBER—Percentage department store sales changes from previous November: Boston +1, Providence —5, New Haven +7. DECEMBER—Percentage retail trade increases over previous December: Bangor 0, Portland 8, Manchester–New Haven 12, Boston–Worcester–Providence 5, New Bedford–Springfield 10, Hartford 13. Wholesale trade increases: Portland–Boston 5, Springfield 10. Payrolls and production above last year, steady to up in month. Aircraft, machine tool, steel, textiles, and brass and copper manufacturing active. Shoe output somewhat slow. Collections fair to good. JANUARY—Cotton markets dull; prices firm. Department store sales 4 to 6% above January 1939.



2. New York City

NOV., 79.1 OCT., 74.3 NOV. 1938, 76.7

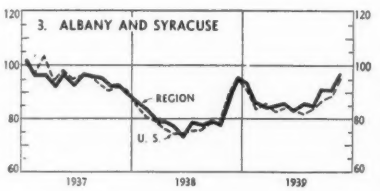
NOVEMBER—Percentage department store sales increases over previous November: New York City 7, Bridgeport 16, Westchester–Stamford 11. DECEMBER—Percentage retail trade changes from previous December: Bridgeport +10, New York City department store sales +8, parcel deliveries +2, hotel sales +1. Bank clearings 11% below last year in New York City, up 11% in Westchester County. Employment down 1% from November; payrolls up 1%. Collections fair. JANUARY—Retail volume for the first half of the month 6 to 9% above last January. Clothing manufacturers report Spring bookings steady to 10% above last year; shirt manufacturers report sharp rise in Spring orders. Building outlook good.



3. Albany and Syracuse

NOV., 96.7 OCT., 91.0 NOV. 1938, 88.9

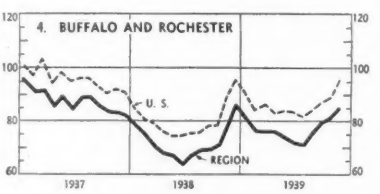
NOVEMBER—Percentage department store sales increases over previous November: Syracuse 13, Northern State 12, Central State 16. DECEMBER—Percentage retail trade increases over previous December: Albany–Utica 10, Binghamton 7, Syracuse 9. Wholesale trade changes: Albany +5, Syracuse —3. Dairy and poultry prices steady, but somewhat low. Payrolls and production above last year, steady to up in month. Metal and textile manufacturing continues at near-capacity level; backlogs somewhat reduced. Binghamton shoe factories showing small gains. Collections fair to good. JANUARY—Trade activity about on a level with previous January. Binghamton shoe industry seasonally slow.



4. Buffalo and Rochester

NOV., 84.8 OCT., 81.1 NOV. 1938, 79.0

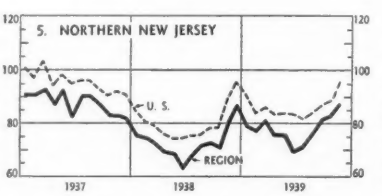
NOVEMBER—Percentage department store sales increases over previous November: Buffalo 11, Rochester 12, Niagara Falls 14. DECEMBER—Percentage retail trade increases over previous December: Buffalo 12, Elmira 5, Rochester 8. Buffalo wholesale trade 10% above last year's comparative. Income of farmers, nurserymen, and florists off somewhat because of dry weather. Employment and payrolls steady to up in comparison with last year. Buffalo steel rate averaged 83.5% of capacity, compared with 44.0% in December, 1938. Collections fair to good. JANUARY—Many plants had to curtail output temporarily because of break in Buffalo water system. Retail sales continued above previous year.



5. Northern New Jersey

NOV., 87.3 OCT., 81.7 NOV. 1938, 80.8

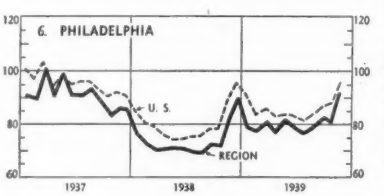
NOVEMBER—Northern New Jersey department store sales 11% above previous November level. DECEMBER—Newark retail trade 4% above previous December; handbag sales up 10 to 30% from last year. Wholesale trade volume 11% above last December, 10% below November. Payrolls and production above last year, steady with previous month. Electrical equipment, machine tools, machinery parts, and aeronautical and marine equipment manufacturing continues at capacity levels. Seasonal decline noted in paint shipments. Collections fair in wholesale, good in retail and manufacturing divisions. JANUARY—Department store sales about 10% above last year. Production and employment steady with December.



6. Philadelphia

NOV., 92.5 OCT., 80.4 NOV. 1938, 82.3

NOVEMBER—Percentage department store sales increases over previous November: Trenton 22, Philadelphia 16, Scranton 11, Harrisburg 6, Wilmington 26. DECEMBER—Percentage retail trade increases over previous December: Trenton–Allentown 8, Philadelphia 7, Reading 18, Scranton–Williamsport–Harrisburg 5, Wilkes-Barre 4, York 14, Wilmington 10. Philadelphia wholesale trade 2% above 1938. Farm prices up slightly. Payrolls and production generally above last year. Shipyards showing good activity. Floor covering, rubber hose, fiber, morocco and textile mills also active. Collections fair to good. JANUARY—Colder weather stimulated heavy apparel sales. Industrial activity even with December.

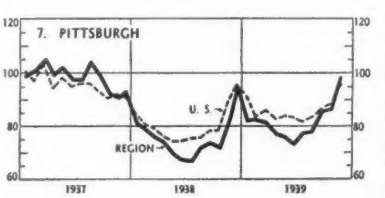


7. Pittsburgh

NOV., 98.4 OCT., 85.7 NOV. 1938, 82.2

NOVEMBER—Percentage department store sales increases over previous November: Erie 19, Pittsburgh–Wheeling 21, West Virginia State 14. DECEMBER—Percentage retail trade increases over previous December: Erie 18, Pittsburgh 11, Youngstown 20, Huntington 15, Charleston 6. Wholesale trade increases: Erie 20, Pittsburgh 5, Charleston 10. Payrolls and production above last year, steady to down in month. Coal, chemical, and glass industries active. Steel production dropped slightly from 94 to 89% of capacity; new business slower, backlogs still heavy. Collections fair to good. JANUARY—Mark-down sales of ready-to-wear met with good response. Trade generally moderately above last year.

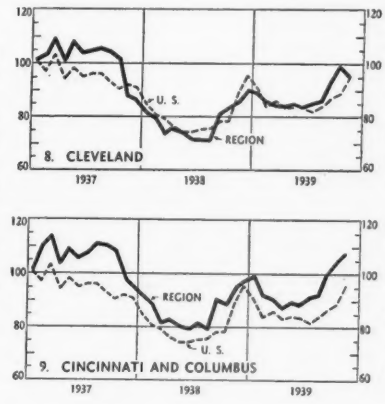
(Continued directly opposite)



8. Cleveland

NOV., 96.3 OCT., 99.4 NOV. 1938, 85.3

NOVEMBER—Percentage department store sales increases over previous November: Cleveland 10, Akron 16, Toledo 5. DECEMBER—Percentage retail trade increases over previous December: Cleveland 5, Akron 12, Canton 35, Lima 20, Toledo 10. Wholesale trade increases: Cleveland–Toledo 10, Akron 3. Farm prices firm. Payrolls and production above last year, steady to up in month. Steel rate off somewhat, but still high. Automotive and airplane parts operations near capacity. Construction activity on uptrend. Collections generally good. JANUARY—Building activity strong. Steel output at about 85% of capacity. Department store sales well above same month last year. Automobile sales increased.



9. Cincinnati and Columbus

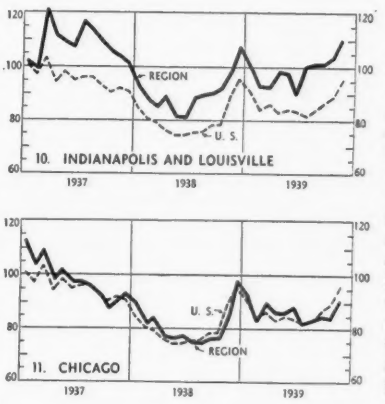
NOV., 106.5 OCT., 103.6 NOV. 1938, 95.0

NOVEMBER—Percentage department store sales increases over previous November: Cincinnati 15, Columbus 13. DECEMBER—Percentage retail trade increases over previous December: Cincinnati 9, Dayton 15, Columbus–Lexington 5, Zanesville 10. Wholesale trade increases: Cincinnati 8, Columbus 10. Tobacco crop average in quantity, quality, and price. Prices of dairy and poultry products somewhat higher. Payrolls and production generally above last year. Pig iron production 60% ahead of last year. Machine tool plants operating at capacity. Seasonal shutdown in Zanesville pottery plants. Collections fair to good. JANUARY—Retail trade about 10% above last year. Wholesaling steady.

10. Indianapolis and Louisville

NOV., 109.8 OCT., 102.6 NOV. 1938, 99.8

NOVEMBER—Percentage department store sales increases over previous November: Louisville 16, Indianapolis 8, Fort Wayne 12. DECEMBER—Percentage retail trade increases over previous December: Louisville 10, Evansville–Indianapolis 8, Terre Haute 12, Fort Wayne 15. Wholesale trade increases: Louisville 4, Indianapolis 10. Tobacco crop large; prices holding up well in comparison with 1938. Payrolls and production above last year, steady in month. Production of metal beds, fencing, and allied lines 35 to 40% ahead of the year-ago level. Collections fair to good in comparison with 1938. JANUARY—Retail sales about even with the comparable period of 1939. Industry active.



11. Chicago

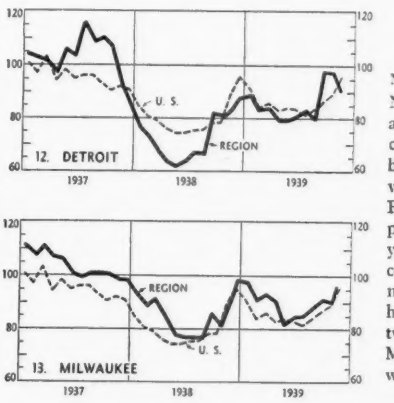
NOV., 91.3 OCT., 83.9 NOV. 1938, 85.1

NOVEMBER—Chicago department store sales 4% above previous November level. DECEMBER—Percentage retail trade increases over previous December: Chicago 11, Rockford–South Bend 20, Peoria 8. Chicago wholesale trade 5% above last year. Winter wheat prospects poor because of lack of snow. Payrolls and production above last year, steady to improved in month. Aviation plants operating at capacity. Automobile production in South Bend 120% ahead of 1938. Steel production well ahead of a year ago. Public utilities and railroads report increased demands on their facilities. Collections good. JANUARY—January white goods sales met with favorable response. Registration at furniture shows 10% above 1939.

12. Detroit

NOV., 90.3 OCT., 97.0 NOV. 1938, 83.5

NOVEMBER—Detroit department store sales 2% above previous November level. DECEMBER—Percentage retail trade increases over previous December: Detroit 4, Grand Rapids 15, Saginaw 5. Wholesale trade increases: Detroit 8, Grand Rapids 12. Hothouse vegetables finding ready market at good prices. Payrolls and production above last year, steady to up in month. Automobile manufacturing close to highest level in last ten years. Electrical appliances and automobile accessory lines also active. Collections fair to good in comparison with last year and last month. JANUARY—Retail sales 5 to 13% above corresponding period of 1939. Wholesale volume 15% above last year.



13. Milwaukee

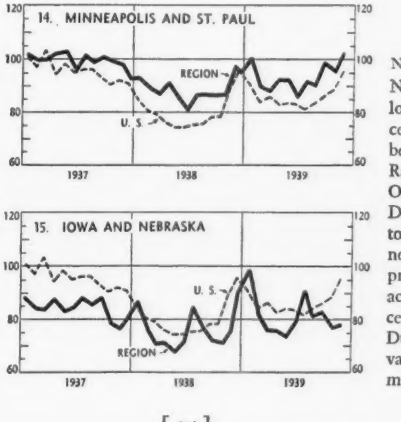
NOV., 94.7 OCT., 89.1 NOV. 1938, 92.7

NOVEMBER—Milwaukee department store sales 3% above previous November level. DECEMBER—Percentage retail trade changes from previous December: Milwaukee +7, Green Bay +6. Milwaukee wholesale trade 6% above December a year ago. Fall and Winter season unusually dry; crop prospects affected. Payrolls and production above last year, steady to up since November. Metal trades continue especially active. Manufacturers of automobile parts and frames, machine tools, other heavy machinery, and electrical equipment running two to three shifts. Collections vary. JANUARY—Milwaukee bank clearings for first week of month well above comparable 1939 figures.

14. Minneapolis and St. Paul

NOV., 102.5 OCT., 95.8 NOV. 1938, 97.5

NOVEMBER—Minneapolis–St. Paul–Duluth–Superior department store sales even with previous November level. DECEMBER—Percentage retail trade increases over previous December: Duluth 8, Minneapolis 12, St. Paul–Billings 7, La Crosse 25, Sioux Falls 10, Butte–Great Falls 5. Wholesale trade increases: Duluth 0, Minneapolis 10, Great Falls 5. Montana Winter wheat prospects good on account of seasonal moisture. Payrolls and production above last year, steady to up since November. Demand for flour, feed, and linseed oil fair to good. Meat packing activity increased. Ore shipping season closed. JANUARY—Cold weather stimulated heavy apparel sales; trade as a whole 4 to 7% above 1939 level.



15. Iowa and Nebraska

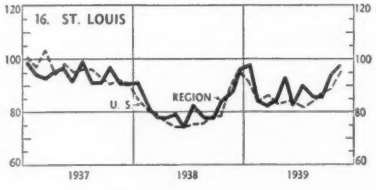
NOV., 77.7 OCT., 76.7 NOV. 1938, 75.9

NOVEMBER—Omaha department store sales 5% below previous November level. DECEMBER—Percentage retail trade increases over previous December: Burlington–Sioux City–Davenport 10, Cedar Rapids 8, Dubuque 17, Waterloo 0, Des Moines–Omaha 5. Wholesale trade increases: Sioux City 7, Des Moines 5, Omaha 10. Recent snow beneficial to crops, although Winter wheat still only 35% of normal. Grain prices up, hogs down. Payrolls and production generally above last year. Flour milling active, on 24-hour production basis. Livestock receipts increased, processing increased accordingly. Dubuque sash and door mills active. Collections vary. JANUARY—Retail stores report increased demand for Winter goods due to cold weather.

16. St. Louis

NOV., 97.5 OCT., 94.3 NOV. 1938, 87.8

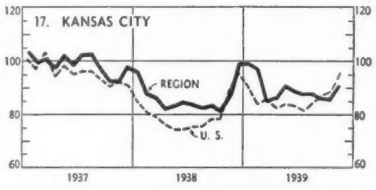
NOVEMBER—Percentage department store sales increases over previous November: St. Louis 5, Springfield (Mo.) 2, Quincy 4. DECEMBER—Percentage retail trade increases over previous December: St. Louis 2, Springfield (Mo.) 8, Springfield (Ill.)–Quincy 10. St. Louis wholesale trade 10% above previous December level. Payrolls and production generally above last year, steady to improved in month. Steel output at 85% of capacity, compared with 81% in November and 51% a year ago. Shoe, dry goods, and apparel lines more active than last year at the same time. Collections fair to good. JANUARY—Retail sales slightly ahead of previous January. Manufacturing and wholesale orders up.



17. Kansas City

NOV., 90.8 OCT., 85.3 NOV. 1938, 87.7

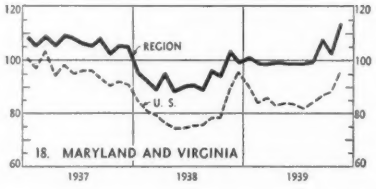
NOVEMBER—Percentage department store sales changes from previous November: Kansas City +3, Oklahoma City —6, Tulsa 0. DECEMBER—Percentage retail trade increases over previous December: Kansas City–Tulsa 5, St. Joseph–Oklahoma City 2, Topeka–Wichita 10. Wholesale trade changes: Kansas City 0, Oklahoma City +2. Snowfall during last week of month provided much needed moisture; crop outlook still below normal. Payrolls and production steady to above last year. Topeka packing industry reported unusually large dollar volume of orders; packing generally 5% above last year. Collections fair to poor. JANUARY —Retail sales somewhat above normal. Wholesale orders even with 1939.



18. Maryland and Virginia

NOV., 112.9 OCT., 102.4 NOV. 1938, 103.3

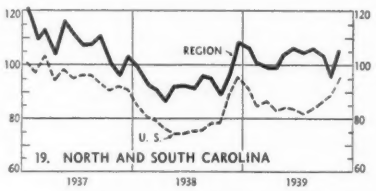
NOVEMBER—Percentage department store sales increases over previous November: Baltimore 12, Washington 10, Richmond–Virginia State 13. DECEMBER—Percentage retail trade increases over previous December: Baltimore 4, Washington 6, Norfolk–Richmond–Lynchburg 10, Roanoke 5, Bristol 11. Wholesale trade increases: Baltimore 2, Norfolk 8, Richmond 15. Value of Virginia leaf tobacco crop 4% above 1938; greater poundage offsetting lower prices. Payrolls and production steady to above last year. Rayon mills operating at capacity. Hosiery and overall orders above 1938. Building active. Collections fair. JANUARY—Retail volume moderately above last year. Industry continues active.



19. North and South Carolina

NOV., 105.9 OCT., 96.3 NOV. 1938, 96.5

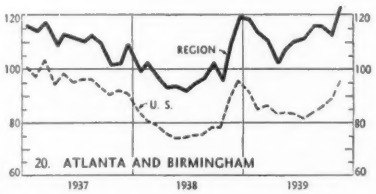
NOVEMBER—Percentage department store sales increases over previous November: North Carolina 9, South Carolina 12. DECEMBER—Percentage retail trade increases over previous December: Asheville–Raleigh 5, Winston-Salem 16, Charlotte 8, Charleston–Columbia 15, Greenville 12; Wilmington sales 2% below last year. Wholesale trade increases: Wilmington 2, Charleston 10, Winston-Salem 14. Farm prices steady. Tourist trade holding up well. Payrolls and production steady to up in comparison with last year, steady to above November levels. Collections fair to poor in comparison with 1938, about same as during previous month. JANUARY—Silk mills on shorter work week, due to high price of raw material.



20. Atlanta and Birmingham

NOV., 123.6 OCT., 112.1 NOV. 1938, 110.0

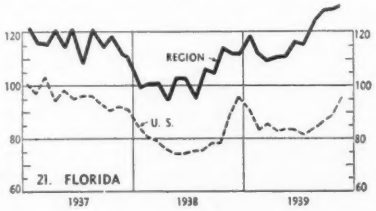
NOVEMBER—Percentage department store sales increases over previous November: Atlanta–Montgomery 14, Birmingham–Nashville 7. DECEMBER —Percentage retail trade increases over previous December: Atlanta 12, Augusta–Mobile 10, Columbus–Savannah 15, Macon–Birmingham 25, Montgomery 7, Chattanooga 9, Knoxville–Nashville 5. Wholesale trade increases: Atlanta 5, Birmingham 10, Nashville 1. Crops in fair condition; prices up somewhat. Payrolls and production steady to above last year. Textile mills working full time. Lumber and other building materials showing decided improvement. Collections fair to good. JANUARY—Nashville aircraft factory nearing completion. Industry active.



21. Florida

NOV., 129.7 OCT., 126.8 NOV. 1938, 112.2

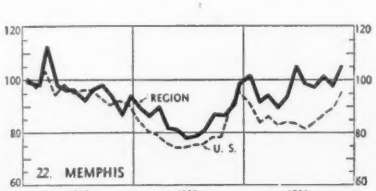
NOVEMBER—Florida department store sales about 16% above previous November level. DECEMBER —Percentage retail trade increases over previous December: Jacksonville 12, Miami 18, Tampa 10. Wholesale trade increases: Jacksonville 9, Tampa 20. Citrus shipments heavy; prices slightly improved. Vegetable shipments lighter than usual; prices good. Payrolls and production steady to above last year. Lumber output and sales off slightly from November. Naval stores steady. Cigar production active in Jacksonville; factories closed in Tampa. Canning activity normal. Collections fair to good in comparison with 1938. JANUARY—Miami tourist trade near usual peak in volume. Retail activity showing large gains.



22. Memphis

NOV., 105.4 OCT., 97.2 NOV. 1938, 90.2

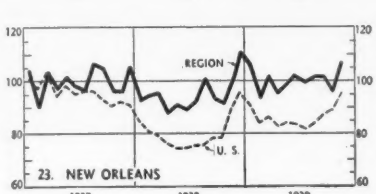
NOVEMBER—Percentage department store sales increases over previous November: Memphis 9, Fort Smith 0, Little Rock 6. DECEMBER—Percentage retail trade increases over previous December: Memphis–Fort Smith 10, Little Rock 12. Memphis wholesale trade 10% above previous December level. Spinach crops harvested; bad weather in last few days cut crop somewhat. Livestock sales increased considerably. Winter wheat and oats in good condition. Payrolls and production steady to above last year. Lumber production at highest point since 1929; number of orders falling off. Furniture manufacturing about 75% ahead of 1938. Collections vary. JANUARY—Seasonable weather increased Winter apparel sales. Industry active.



23. New Orleans

NOV., 106.6 OCT., 96.2 NOV. 1938, 100.4

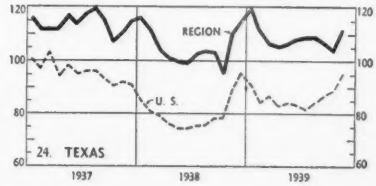
NOVEMBER—New Orleans department store sales 9% above previous November level. DECEMBER—Percentage retail trade changes from previous December: New Orleans +5, Jackson +10, Meridian —4. New Orleans wholesale trade up slightly from the year-ago level. Strawberry crop in good condition, aided by recent cold weather. Payrolls and production steady with last year in New Orleans, down in Meridian. Sugar grinding completed; refining active. Oil drilling and production of petroleum products continue to show good levels of operations. Collections fair. JANUARY—Cotton export movement heavy; ginning practically finished. Little change in retail trade. Tourist prospects good.



24. Texas

NOV., 112.0 OCT., 104.0 NOV. 1938, 108.1

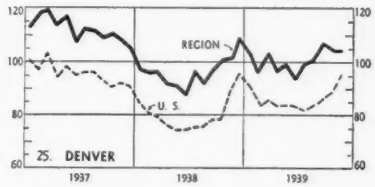
November—Percentage department store sales changes from previous November: Dallas–San Antonio 0, Fort Worth —3, Houston —4. December—Percentage retail trade increases over previous December: Dallas 8, Fort Worth–Amarillo–Galveston–San Antonio–Shreveport 5, Wichita Falls 10, El Paso 9, Houston 3; Austin trade off 3%. Wholesale trade increases: Dallas–Shreveport 5, Houston–Fort Worth 4, San Antonio 16. Recent snows in Panhandle and West Texas beneficial to crops, but still not enough sub-soil moisture. Payrolls and production steady with 1938 in most sections. Oil production continues active. January—Citrus prices fair to poor; large crop harvested. Farm income up from year ago.



25. Denver

NOV., 104.2 OCT., 104.2 NOV. 1938, 101.5

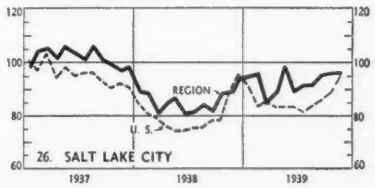
November—Denver department store sales 1% above previous November level. December—Percentage retail trade increases over previous December: Denver 3, Albuquerque 5. Denver wholesale trade 5% above previous year's comparative. Winter wheat prospects 38% of normal; some moisture in month improved outlook to some extent. Payrolls and production steady with corresponding period of last year and about at the same level as November. Collections steady with previous year and with a month ago. January—Sales of home furnishings and all kinds of sports wearing apparel met with particularly good response. Wholesale activity seasonally rather slow; most houses making plans for active new year.



26. Salt Lake City

NOV., 95.8 OCT., 95.8 NOV. 1938, 89.4

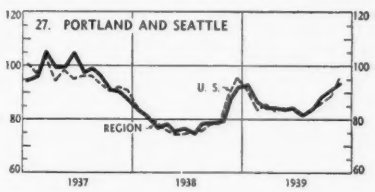
November—Salt Lake City department store sales 1% above level of corresponding month in 1938. December—Salt Lake City retail sales 10% above previous December level; wholesale volume up 7%. Large amount of merchandise was moved during after-Christmas sales of men's and women's apparel. Jewelers reported good increase in sales of moderate-priced merchandise. Wholesale dealers in silverware, radios, and household electrical appliances reported an increase in sales over last year of about 10%. Sales of groceries and foodstuffs were about even. Toy sales rose 15% over last December. Payrolls and production increased over previous month and year. Snow and rain helped range conditions. January—Special sales raised retail totals above 1939.



27. Portland and Seattle

NOV., 93.4 OCT., 90.8 NOV. 1938, 87.7

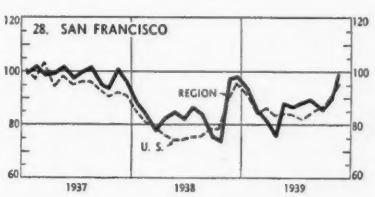
November—Percentage department store sales changes from previous November: Seattle +5, Tacoma +2, Spokane–Portland —1. December—Percentage retail trade increases over previous December: Seattle–Portland 9, Tacoma 10, Spokane 4. Wholesale trade increases: Seattle 10, Portland 0. Farm prices improved, except apples and pears. Payrolls and production generally above last year. Large Government building projects under way near Tacoma and Puyallup Valley. Lumber industry seasonally slow. Salmon packers getting good prices. Bonneville power now available to consumers. January—Knitted goods sales 15% above last year. Inventories 10% lower than in January, 1939.



28. San Francisco

NOV., 99.2 OCT., 88.0 NOV. 1938, 97.3

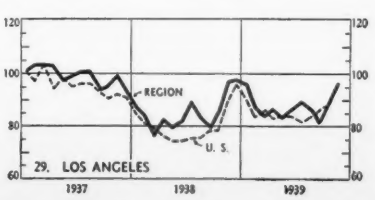
November—Percentage department store sales changes from previous November: San Francisco —4, Oakland +1. December—Percentage retail trade increases over previous December: San Francisco–Oakland 0, Sacramento 8, Fresno 10. San Francisco wholesale trade 7% above last year. Rainfall only about one-fourth of normal; crop prospects affected. Payrolls and production steady to above last year. Machinery and metal goods doing well. Lumber industry seasonally slow. Paper manufacturing at favorable level. Canning at seasonal standstill. Home building fairly active. Collections fair. January—Waterfront strike ended. Retail trade volume stepped up by clearance sales.



29. Los Angeles

NOV., 96.8 OCT., 89.0 NOV. 1938, 97.8

November—Percentage department store sales changes from previous November: Los Angeles —7, Arizona 0. December—Los Angeles retail trade 5% above previous December level; Phoenix trade also improved. Los Angeles wholesale volume 8% above similar month in 1938. Good lettuce and citrus yields; lettuce price poor, although most farm prices favorable. Payrolls and production above last year. Aircraft production and orders at peak levels. Automobile and tire production above last year. Motion picture production seasonally slow. Collections good. January—Shopping interest centered on annual sales events; retail volume averaged about the same as last year.



WINTER SHOPPERS IN CLEVELAND, OHIO—GALLOWAY PHOTO

INDUSTRIAL AND COMMERCIAL FAILURES

	Number of Failures			Current Liabilities *Thousands of dollars*			Total Liabilities *Thousands of dollars*			Dun's Insolvency Index † Unadjusted			Adjusted ‡		
	1939	1938	1937	1939	1938	1937	1939	1938	1937	1939	1938	1937	1939	1938	1937
Jan.	1,263	1,377	841	19,122	21,415	12,003	23,192	27,162	14,992	69.3	76.2	47.7	56.3	62.0	38.8
Feb.	963	1,149	755	12,788	21,028	14,004	12,795	25,501	22,887	62.5	75.2	50.6	54.3	65.4	44.0
Mar.	1,057	1,167	861	17,851	40,325	22,591	18,164	80,373	78,878	58.1	64.8	47.1	57.5	64.2	47.1
Apr.	1,064	1,172	818	17,435	21,147	12,893	20,693	29,355	13,628	58.5	65.1	48.3	56.8	63.2	47.4
May	1,028	1,123	875	14,664	19,139	13,088	19,501	19,831	14,965	54.3	59.8	47.6	53.8	59.2	47.6
June	847	1,073	703	11,460	15,918	12,829	11,616	16,892	16,737	50.3	64.1	41.1	52.4	67.5	43.3
July	885	1,038	651	14,128	14,761	12,780	22,763	15,008	13,955	48.3	57.2	37.9	54.3	64.3	42.1
Aug.	859	1,015	736	11,259	16,382	14,950	11,714	17,252	19,473	46.8	53.8	39.7	55.1	63.3	46.7
Sept.	758	866	584	9,402	14,341	9,818	10,586	15,183	11,308	42.9	51.6	35.2	51.1	61.4	41.9
Oct.	916	997	815	16,140	13,219	14,079	16,795	16,960	15,381	49.7	54.7	45.2	54.0	59.4	49.1
Nov.	886	984	842	11,877	12,302	16,400	13,550	17,281	17,709	54.3	53.9	52.7	52.2	51.8	51.2
Dec.	882	875	1,009	12,078	36,528	27,818	13,769	54,736	36,963	49.7	56.7	58.0	49.2	56.1	58.0
Total	11,408	12,836	9,490	168,204	246,505	183,253	195,138	335,534	276,876	53.7	61.1	45.9	...	...	...

† Apparent annual failures per 10,000 enterprises. ‡ For seasonal variation.

ANALYZING *the* RECORD *of* INDUSTRIAL *and* COMMERCIAL FAILURES

AN 11 PER CENT DECLINE IN 1939

THE trend of industrial and commercial failures during 1939 was gradually downward, and the year ended with a definitely declining movement. With 882 cases reported in December, the year closed with a total of 11,408 failures, compared with 12,836 in 1938. The total, however, did not reach the low figures of 9,607 and 9,490 in 1936 and 1937. Following the break in business recovery in the last half of 1937, failures rose sharply and were on a relatively high level throughout 1938. The 1939 figures indicate about a 50 per cent recovery in the failure record.

The picture is slightly different when viewed from the aspect of money losses. Current liabilities of the 11,408 concerns at the time of failures totalled only $168,204,000 in comparison with $246,505,000 of liabilities in 1938, and $183,253,000 in 1937. Whereas the number of failures declined 11 per cent in 1939, the drop in liabilities amounted to 32 per cent, and the total fell below that of both 1938 and 1937. In fact, liabilities were the lowest since those reported in the year 1919, when failures were at their all-time low. In addition to the $168,000,000 current liabilities there were some $27,000,000 worth of mortgages and funded debt held by the public.

Dun's Insolvency Index presents a refinement of the failure record. It adjusts for the varying number of working days in the months, and also for an increasing or decreasing number of concerns in business, as determined by the number of names in the Dun & Bradstreet Reference Book. The index is expressed as the apparent annual number of failures in each 10,000 concerns in business. In terms of the index, failures in 1939 averaged 53.7 in every 10,000 concerns, compared with 61.1 in 1938 and 45.9 and 47.8 in 1937 and 1936, respectively. The adjusted index, from which seasonal fluctuations have been removed, is used for comparison with other indexes of business activity. The diagram presenting a twenty-six year comparison between the failure index and the Cleveland Trust Company index of business activity

Dun's Insolvency Index, 1896-1939

Apparent Annual Number of Failures for Each 10,000 Listed Commercial Enterprises

Year	Index	Year	Index	Year	Index
1896	133.4	1911	88.0	1926	101.0
1897	124.7	1912	99.8	1927	106.4
1898	110.6	1913	98.1	1928	108.5
1899	82.1	1914	117.6	1929	103.9
1900	91.6	1915	132.7	1930	121.6
1901	90.4	1916	99.7	1931	133.4
1902	93.1	1917	80.3	1932	154.1
1903	94.0	1918	58.7	1933	102.6
1904	92.3	1919	37.4	1933*	100.3
1905	84.9	1920	48.3	1934	61.1
1906	76.8	1921	101.9	1935	61.7
1907	82.8	1922	119.8	1936	47.8
1908	108.2	1923	93.4	1937	45.9
1909	87.1	1924	100.0	1938	61.1
1910	83.8	1925	100.4	1939	53.7

* New series: real estate and financial companies omitted.

presents clearly the reverse relationship which exists between failures and general business conditions (chart below).

The 1939 trend of failures followed the normal seasonal pattern to a remarkable degree. Not for many years has there appeared to be such an absence of factors which disturb the usual month-to-month course of business defaults. The result was very little fluctuation in the course of the adjusted index. The increased business activity of 1939 has not yet had a drastic effect upon the failure record. Rather, has there been throughout the year a gradual, though not uninterrupted, downward trend, with each successive low point below the previous one. In both November and December, however, the seasonal increases were less than normal, and the adjusted index fell to an appreciable extent.

Industrial and commercial failures comprise but a small part of total discontinuances from business. The failure record is confined for the most part to court cases, supplemented by voluntary withdrawals from business with known loss to creditors, whereas discontinuances without loss to creditors can take place under many circumstances. Failures in 1939 constituted about 3.3 per cent of total discontinuances of 349,000, as measured by the number of names withdrawn from the DUN & BRADSTREET Reference Book. Many of these discontinuances were succeeded by new enterprises with no interruption of business. Of the total new enterprises which in 1939 numbered 376,000, 42 per cent represented immediate successions to old businesses. During the year there was a net increase of 27,000 concerns.

The decrease in 1939 failures appeared in all five main industry groups. The rate of decline, however, varied considerably. It was highest in commercial service at 16 per cent. In retail trade it amounted to 13 per cent; in manufacturing, to 11 per cent; in construction, to 7 per cent; and in wholesale trade, to only 3 per cent. These rates of decline represent the varying speeds at which the groups have travelled on the return trip to the low levels of 1936 and 1937.

However, the speed of increase during 1938 also varied, so that the rate of return indicates different goals attained. For instance, retail trade failures rose

INDUSTRIAL AND COMMERCIAL FAILURES, 1896-1939

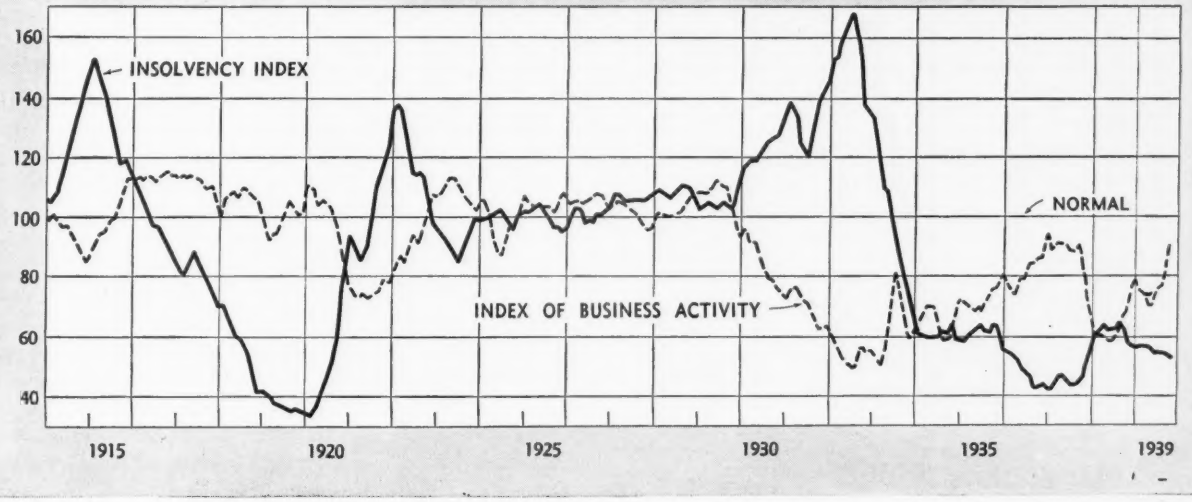
(Current liabilities in thousands of dollars)

Year	No.	Liabilities	Year	No.	Liabilities
1896....	15,088	226,101	1918....	9,982	163,020
1897....	13,351	154,333	1919....	6,451	113,291
1898....	12,186	130,663	1920....	8,881	295,121
1899....	9,337	90,881	1921....	19,652	627,401
1900....	10,774	138,496	1922....	23,676	623,895
1901....	11,002	113,091	1923....	18,718	539,387
1902....	11,615	117,477	1924....	20,615	543,226
1903....	12,069	155,444	1925....	21,214	443,744
1904....	12,199	144,202	1926....	21,773	409,233
1905....	11,520	102,676	1927....	23,146	520,105
1906....	10,682	119,202	1928....	23,842	489,559
1907....	11,725	197,386	1929....	22,909	483,252
1908....	15,690	222,316	1930....	26,355	668,282
1909....	12,924	154,340	1931....	28,285	736,310
1910....	12,652	201,757	1932....	31,822	928,313
1911....	13,441	191,062	1933*...	19,859	457,520
1912....	15,452	203,118	1934....	12,091	333,959
1913....	16,037	272,673	1935....	12,244	310,580
1914....	18,280	357,909	1936....	9,607	203,173
1915....	22,156	302,286	1937....	9,490	183,253
1916....	16,993	196,212	1938....	12,836	246,505
1917....	13,855	182,441	1939....	11,408	168,204

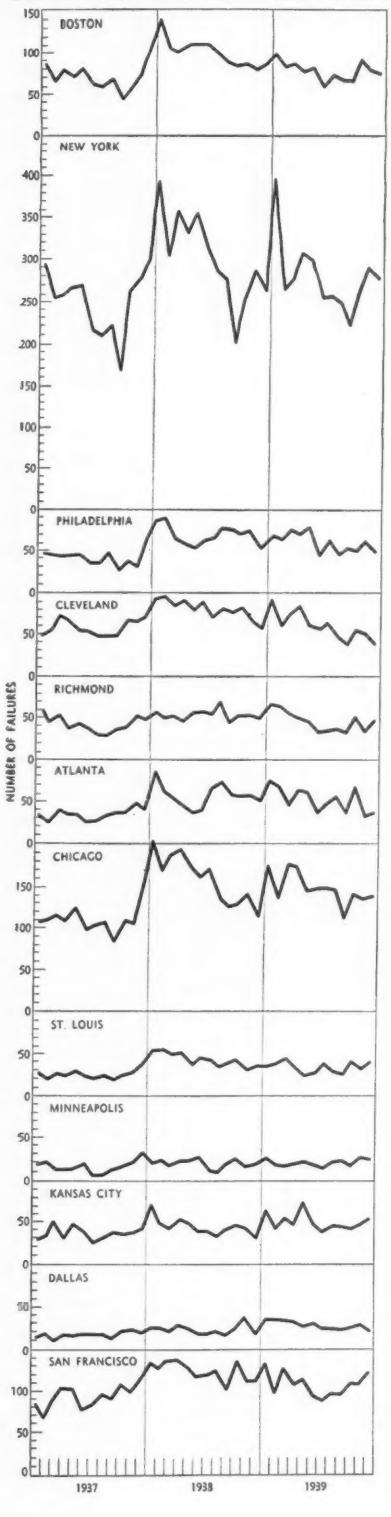
* Series revised from 1933 on to exclude real estate and financial companies. Original 1933 figures were 20,307 and $502,830.

FAILURES COMPARED WITH BUSINESS ACTIVITY

Dun's Insolvency Index (Three-month moving average) and the Cleveland Trust Company's Index of Business Activity



FAILURES IN FEDERAL RESERVE DISTRICTS



most sharply in all lines in 1938, and the 1939 decline returned them to a level 28 per cent above 1937, whereas wholesale trade failures rose less sharply in 1938, but with a recovery of only 3 per cent in 1939 now stand at 26 per cent

Industry Group	Number of Failures 1937	1938	1939	Per Cent Change 1938-1939
Manufacturing	1,997	2,428	2,167	—11
Wholesale Trade	1,003	1,289	1,256	— 3
Retail Trade	5,423	7,925	6,925	—13
Construction	584	625	582	— 7
Commercial Service	438	569	478	—16
Total	9,490	12,836	11,408	—11

above the 1937 low, on a level similar to that of retail trade. Manufacturing failures ended 1939 only 9 per cent above their 1937 low, while in the two smaller groups, construction and commercial service failures have reached their 1937 low levels.

Industry Group	Index, 1937 = 100 1937	1938	1939
Manufacturing	100	122	109
Wholesale Trade	100	129	126
Retail Trade	100	146	128
Construction	100	118	100
Commercial Service	100	118	99
Total	100	135	120

In retail trade the sharpest declines in 1939 were found to be in those lines in which the 1938 rise had been most acute: apparel, furniture, and automotive lines. These were down from 16 to 127 per cent. The large food group declined 8 per cent.

In manufacturing, the textile, forest, chemical, iron and steel, and machinery groups, all of which rose in 1938, declined to a marked degree in 1939. There were also substantial drops in paper, stone, and transportation lines. Contrariwise, increased failures were reported in the food, fuels, and leather groups.

Additional failures were also reported in some wholesale lines: food, hardware, and drugs—to balance declines in clothing, dry goods, and particularly automotive lines. All construction and service lines were down.

The amount of liabilities at time of failure is the best available measure of size of concern. The trend in evidence since 1934 of a slow but steady increase in the proportion of small failures and a corresponding decrease in the proportion of large failures was continued in 1939.

The trend of the large failures is significant, since the large failures determine to a great extent the amount of money losses. In 1939, 227 failures with liabilities of $100,000 or more involved current liabilities of $50,000,000 with an additional $27,000,000 of securities in the hands of the public. In contrast to these amounts the current liabilities of some 10,000 small failures with liabilities under $25,000 amounted to $67,000,000.

LARGE FAILURES BY AMOUNT OF LIABILITIES

Year	$100,000 to $1,000,000	$1,000,000 and Over
1934	615	55
1935	496	57
1936	290	32
1937	266	21
1938	263	20
1939	213	14

Legal Channels

Analysis of the legal channels through which large failures entered the courts in the last two years reveals that in 1939 relatively fewer sought reorganization through Chapter X of the new bankruptcy act or an arrangement through Chapter XI than sought an adjustment of debts under Section 77B in 1938. Rather was there a growing tendency to seek straight voluntary bankruptcy, or even, apparently, to wait for creditors to force action. Whatever the reason, creditors entered involuntary petitions in bankruptcy against 15 per cent of the large failures in 1939 in comparison with such action against only 10 per cent in 1938.

From 1938 to 1939 small failures with liabilities under $25,000 declined 10 per cent, middle-sized failures with debts between $25,000 and $100,000 dropped 20 per cent, and the large failures also 20 per cent. The most conspicuous drop in both middle-sized and large failures occurred in retail trade, where the former fell 26 per cent and the latter 41 per cent. In manufacturing, the drop was 19 and 15 per cent, respectively.

The 1939 decline in failures was by no means uniform over the entire country. In fact, in the three Federal Reserve districts of Minneapolis, Kansas City, and Dallas, covering the great Middle Western States, 1939 failures were on the increase. In the districts containing the two largest cities, New York and Chicago, less of a decline developed than in the other sections—only an 8 per cent drop, in comparison with an average of about 15 per cent in the Philadelphia, Richmond, Atlanta, and San Francisco districts, and over 20 per cent in the Boston, Cleveland, and St. Louis districts. The Cleveland district with a 27 per cent drop led the country in improvement, as measured by declining number of business failures. Potential money losses, however, were less in every district except Dallas.

In the three Western districts reporting increases, the additional failures occurred in each case in manufacturing, wholesaling, and retailing, and usually in construction and commercial service. Manufacturing failures were up in the Richmond, Atlanta, and St. Louis districts also. Wholesale failures were up in all districts but three: Boston, New York, and St. Louis. Retail failures were down all over the country, with the exception of the three Western districts.

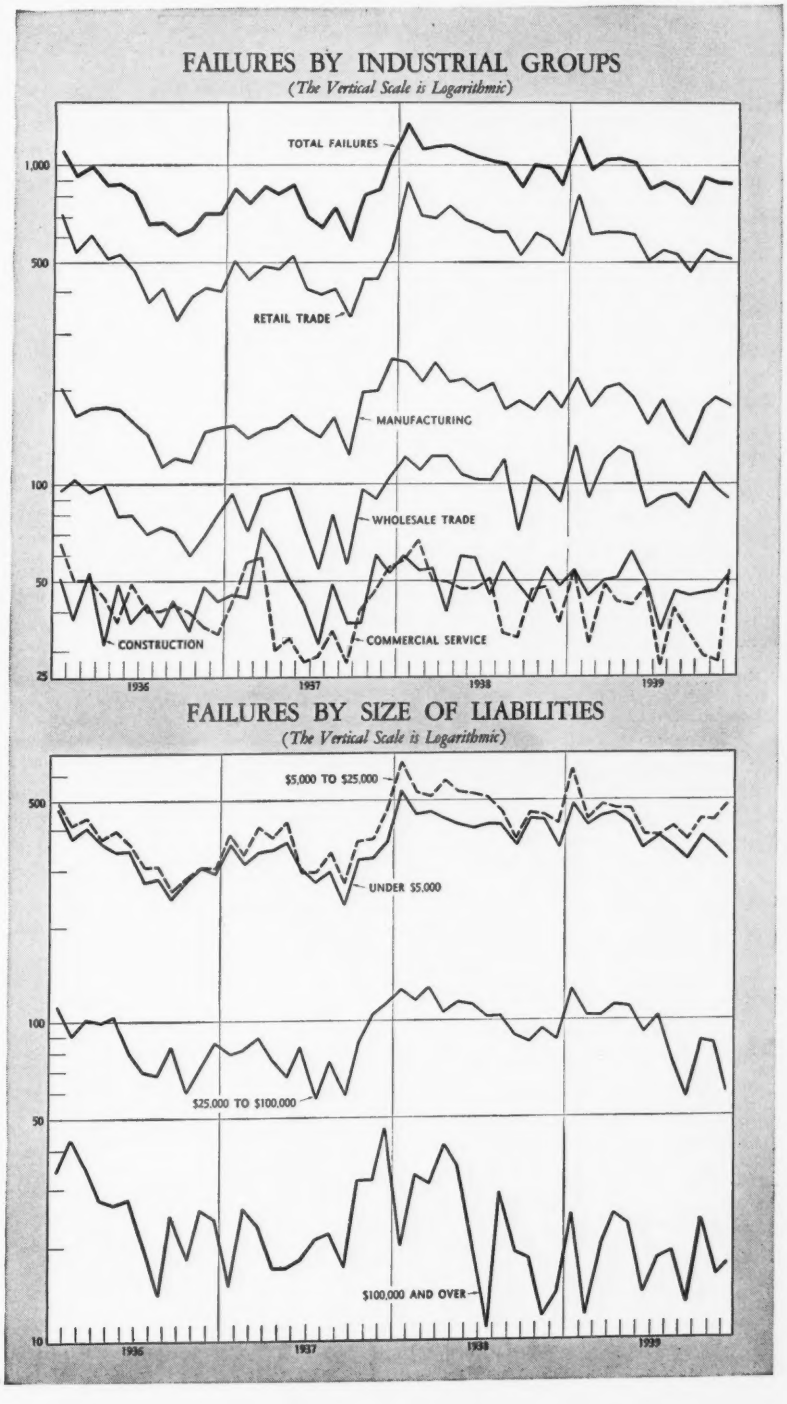
The following table presents the changes in the records of the Federal Reserve districts from 1938 to 1939, with the per cent changes from 1937 to 1938 for comparison:

Federal Reserve Districts	Total 1939	Total 1938	Per Cent Change 1938-1939	Per Cent Change 1937-1938
Cleveland ...	706	964	—27	+40
Boston	927	1,192	—22	+38
St. Louis....	395	499	—21	+75
Richmond ...	529	639	—17	+21
Philadelphia .	711	822	—14	+65
San Francisco	1,286	1,473	—13	+33
Atlanta	614	682	—10	+70
New York ...	3,350	3,645	— 8	+21
Chicago	1,762	1,909	— 8	+44
Minneapolis .	231	226	+ 2	+10
Kansas City..	576	530	+ 9	+24
Dallas	321	255	+26	+40
Total	11,408	12,836	—11	+35

December Failures

Failures numbered 882 in December, with liabilities of $12,078,000. While there was practically no change in numbers from the 886 reported in November, the actual trend was downward when the additional working days in December were discounted, as in the insolvency index. The index dropped 4.6 points, from 54.3 in November to 49.7 in December. A year ago the index stood at 53.9 in November and 56.7 in December.

The downward trend prevailed in the three main industry groups during December, although not uniformly within the sub-groups. In manufacturing, textile, paper, iron and steel, and machinery failures increased, moving against the general trend. In wholesale trade, failures in building materials and electrical goods increased; and in retail trade, food, restaurant, and drug failures moved against the trend, as did



country general stores. The balancing increases in the main groups occurred in construction and particularly in commercial service, where large increases took place in nearly every line.

Lessening failures of substantial concerns, those with liabilities between $25,000 and $100,000 was a feature of the December record. Total failures of this size fell from 85 in November to 59 in December, with those in manufacturing dropping from 31 to 9. A year ago there were 87 failures of this size. There were 18 very large failures in December, compared with 16 in November and 14 a year ago. Small failures, with liabilities under $25,000, rose slightly.

December failures were definitely down in the largest cities, New York, Chicago, and Philadelphia. In the 25 largest cities as a whole failures dropped 14 per cent, on a daily basis, but in the balance of the country there was little change from November.

By Federal Reserve districts the trends were very mixed and definitely marked in either the one direction or the other. For instance, December failures were down in the Boston, New York, Philadelphia, Cleveland, Minneapolis, and Dallas districts, and up in the Richmond, Atlanta, Chicago, St. Louis, Kansas City, and San Francisco districts.

FAILURES BY DIVISIONS OF INDUSTRY—
YEARLY TOTALS AND DECEMBER, 1939 AND 1938

(Current liabilities in thousands of dollars)

	Number				Current Liabilities			
	Year 1939	Year 1938	Dec. 1939	Dec. 1938	Year 1939	Year 1938	Dec. 1939	Dec. 1938
TOTAL UNITED STATES	11,408	12,836	882	875	168,204	246,505	12,078	36,528
MANUFACTURING (total)	2,167	2,428	179	175	66,895	98,251	4,837	6,285
Foods	525	445	33	33	19,438	15,316	1,462	1,743
Textiles	444	597	43	44	10,125	16,818	857	540
Forest Products	188	210	11	21	5,291	6,417	153	489
Paper, Printing, and Publishing	166	186	17	8	3,621	6,675	266	89
Chemicals and Drugs	80	98	6	11	1,067	2,126	65	185
Fuels	58	48	5	3	5,383	19,504	304	156
Leather and Leather Products	89	80	3	5	3,774	2,016	19	169
Stone, Clay, Glass and Products	70	82	5	4	1,943	3,783	272	116
Iron and Steel	113	142	15	8	3,786	8,616	162	524
Machinery	130	156	10	11	5,918	6,084	844	704
Transportation Equipment	31	57	3	3	1,233	3,403	168	1,206
All Other	273	327	28	24	5,316	7,493	265	364
WHOLESALE TRADE (total)	1,256	1,289	90	88	22,352	49,732	1,262	23,676
Farm Products, Foods, Groceries	478	467	28	36	8,961	8,420	378	682
Clothing and Furnishings	80	105	6	10	952	1,789	46	136
Dry Goods and Textiles	38	52	2	4	714	1,258	11	68
Lumber, Bldg. Materials, H'ware	106	100	13	3	2,585	4,451	244	122
Chemicals and Drugs	53	46	4	5	794	22,502	33	22,021
Fuels	27	31	1	1	643	1,654	10	11
Automotive Products	74	96	6	6	932	1,744	85	76
Supply Houses	91	108	6	7	1,144	1,578	57	202
All Other	309	284	24	16	5,627	6,336	398	358
RETAIL TRADE (total)	6,925	7,925	508	527	59,714	76,528	4,176	4,142
Foods	1,909	2,066	170	157	11,012	11,387	1,077	868
Farm Supplies, General Stores	266	287	20	15	2,029	2,474	135	131
General Merchandise	360	401	20	25	3,750	4,333	146	277
Apparel	1,508	1,807	100	127	11,958	16,866	748	1,003
Furniture, Housech'd Furnishings	480	610	27	29	4,708	10,043	238	309
Lumber, Bldg. Materials, H'ware	381	406	20	20	5,033	4,655	244	153
Automotive Products	477	659	26	38	5,824	10,485	186	450
Restaurants	663	699	63	50	6,937	7,693	879	499
Drugs	440	460	32	33	3,934	3,812	191	265
All Other	441	530	30	33	4,529	4,780	332	187
CONSTRUCTION (total)	582	625	52	48	10,806	10,081	1,057	797
General Contractors	76	78	20	2	2,627	1,376	563	30
Carpenters and Builders	150	180	5	15	3,550	4,274	43	356
Building Sub-contractors	336	345	25	28	3,856	3,518	227	375
Other Contractors	20	22	2	3	773	913	224	36
COMMERCIAL SERVICE (total)	478	569	53	37	8,437	11,913	746	1,628
Cleaners and Dyers, Tailors	100	128	9	8	1,180	1,309	68	150
Haulage, Buses, Taxis, etc.	119	148	14	5	2,131	3,200	197	54
Hotels	39	46	4	3	2,099	3,856	73	706
Laundries	48	52	6	4	1,163	1,622	248	573
Undertakers	30	51	3	5	213	473	16	33
All Other	142	144	17	12	1,651	1,453	144	112

Canadian Failures

Canadian failures continued a 10 per cent rise in numbers from 1937 to 1938 with a 24 per cent rise from 1938 to 1939. Liabilities, after increasing 48 per cent between 1937 and 1938, showed only a 5 per cent increase to 1939. Annual figures were as follows: 1937, 952 failures with liabilities of $7,426,000; 1938, 1,049 failures with debts of $11,036,000; and 1939, 1,299 failures with liabilities of $11,635,000.

The 1939 rise in failures was more rapid in the sections of the country outside the cities, than in the large cities themselves, and more pronounced in the western Provinces of Manitoba, Saskatchewan, and Alberta, than in the Eastern sections. British Columbia, however, reported fewer 1939 failures.

Failures in manufacturing increased 4 per cent; wholesale trade, 40; retail trade, 25; construction, 41; and commercial service, 97.

December failures numbered 120 with liabilities of $938,000. This was an increase from the 95 reported in November, but a lower figure than the 132 and 154 reported in September and October.

SIGNIFICANT BUSINESS INDICATORS

COMPILED BY THE STATISTICAL STAFF OF "DUN'S REVIEW"

More detailed figures appear in "DUN'S STATISTICAL REVIEW"

Building Permit Values—215 Cities

Geographical Groups:	December 1939	December 1938	Change P. Ct.	November 1939	Change P. Ct.
New England	$3,917,272	$4,563,010	— 14.2	$8,298,361	— 52.8
Middle Atlantic	18,831,024	28,969,593	— 35.0	24,758,569	— 23.9
South Atlantic	9,220,943	9,494,085	— 2.9	11,180,268	— 17.5
East Central	14,512,085	15,585,407	— 6.9	24,774,150	— 41.4
South Central	8,485,093	10,300,809	— 17.6	8,563,692	— 0.9
West Central	5,850,236	4,670,470	+ 25.3	5,449,663	+ 7.4
Mountain	1,711,989	1,897,094	— 9.8	1,750,260	— 2.2
Pacific	14,108,003	14,101,735	+ 0.1	16,312,277	— 13.5
Total U. S.	$76,636,645	$89,582,203	— 14.5	$101,087,240	— 24.2
New York City	$13,390,384	$22,262,447	— 39.9	$15,794,466	— 15.2
Outside N. Y. C.	$63,246,261	$67,319,756	— 6.1	$85,292,774	— 25.8

Bank Clearings—22 U. S. Cities

(Millions of dollars)

	Monthly			Daily Average		
	1939	1938	1937	1939	1938	1937
January	23,187	21,798	27,226	927.5	871.9	1,089.0
February	19,711	17,584	23,720	896.0	799.2	1,078.1
March	24,995	22,822	29,412	925.7	845.3	1,089.3
April	21,798	21,667	26,086	871.9	833.4	1,003.3
May	22,188	20,169	23,951	853.4	806.8	958.0
June	23,022	23,959	25,903	885.5	921.5	996.3
July	21,386	21,624	26,015	855.4	865.0	1,000.6
August	22,591	19,716	22,260	836.7	730.2	856.2
September	23,820	21,733	24,076	952.8	869.3	963.0
October	22,244	24,011	24,668	889.8	960.4	986.7
November	22,598	21,637	21,796	982.5	940.7	947.6
December	26,596	27,697	25,805	1,063.8	1,065.3	992.5
Total	274,136	264,417	300,918	911.7	875.8	996.7

Bank Clearings for Individual Cities (000 omitted)

	December 1939	December 1938	Change P. Ct.	November 1939
Boston	$1,101,118	$1,071,542	+ 2.8	$1,028,660
Philadelphia	1,901,000	1,759,000	+ 8.1	1,727,000
Buffalo	158,832	145,651	+ 9.0	150,024
Pittsburgh	660,844	566,149	+ 16.7	568,218
Cleveland	519,920	434,435	+ 19.7	484,113
Cincinnati	**281,072**	264,515	+ 6.3	273,814
Baltimore	352,771	319,288	+ 10.5	315,159
Richmond	205,276	186,778	+ 9.9	220,771
Atlanta	294,300	268,900	+ 9.4	271,400
New Orleans	202,959	182,721	+ 11.1	189,681
Chicago	1,620,711	1,434,175	+ 13.0	1,347,096
Detroit	516,342	477,472	+ 8.1	454,272
St. Louis	436,853	410,432	+ 6.4	413,617
Louisville	173,584	166,689	+ 4.1	153,616
Minneapolis	325,878	295,763	+ 10.2	310,752
Kansas City	440,298	405,968	+ 8.5	431,389
Omaha	141,304	142,691	— 1.0	140,620
Dallas	274,148	245,764	+ 11.5	245,378
San Francisco	685,781	688,448	— 0.4	651,655
Portland, Ore.	141,871	127,820	+ 11.0	138,168
Seattle	164,641	152,336	+ 8.1	160,834
Total 21 Cities	$10,599,503	$9,746,537	+ 8.8	$9,676,237
New York	$15,996,090	$17,950,624	— 10.9	$12,921,695
Total 22 Cities	$26,595,593	$27,697,161	— 4.0	$22,597,932

Dun & Bradstreet Weekly Food Price Index

The index represents the sum total of the wholesale price per pound of 31 commodities in general use.

Weeks:	1940	1939	1938	1937
Jan. 30	$2.36	$2.31	$2.46	$2.93
Jan. 23	2.35	2.30	2.47	2.94
Jan. 16	2.34	2.30	2.51	2.95
Jan. 9	2.35	2.31	2.53	2.99
	1939	1938	1937	1936
Dec. 26	2.33	2.35	2.56	2.94
Dec. 19	2.34	2.34	2.63	2.92
Dec. 12	2.32	2.38	2.65	2.91

	High		Low	
1940	$2.36	Jan. 30	$2.34	Jan. 2
1939	$2.46	Sept. 19	$2.13	Aug. 15
1938	$2.53	Jan. 4	$2.34	May 10

Dun & Bradstreet Daily Weighted Price Index 30 Basic Commodities

(1930-1932 = 100)

	1940	1939		
	Jan.	Dec.	Nov.	Oct.
1	*	118.96	118.13	†
2	123.34	118.77	117.91	118.60
3	123.13	†	118.16	118.22
4	122.87	118.97	118.42	118.41
5	122.61	119.65	†	118.03
6	122.46	119.75	118.47	118.87
7	†	120.03	*	118.13
8	122.89	119.83	118.37	†
9	122.67	120.19	118.13	117.64
10	122.44	†	118.62	117.82
11	122.19	120.16	*	118.36
12	121.57	120.62	†	*
13	121.57	121.99	118.21	118.40
14	†	121.64	118.49	118.37
15	122.34	121.98	118.03	†
16	121.66	122.85	118.07	118.70
17	121.73	†	117.56	119.11
18	122.13	124.19	117.89	119.66
19	122.09	123.63	†	119.38
20	122.11	123.16	118.24	118.94
21	†	123.19	118.14	119.07
22	121.35	122.59	118.18	†
23	120.38	*	*	118.76
24	120.73	†	117.99	118.56
25	120.82	*	117.80	119.02
26	120.59	122.53	†	118.46
27	120.61	122.42	117.62	118.53
28	†	122.52	117.65	118.28
29	119.69	122.47	117.98	†
30	119.66	*	118.64	118.34
31	119.72	†		118.36

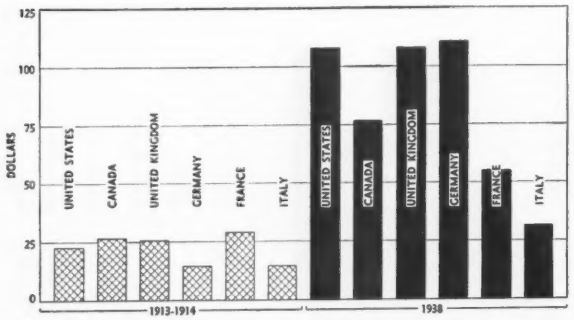
† Sunday. * Markets closed.

	High		Low	
1940	123.34	Jan. 2	119.66	Jan. 30
1939	124.19	Dec. 18	101.40	July 24
1938	117.06	Jan. 10	102.43	June 2

THROUGH THE STATISTICIAN'S EYES

ODD AND INTERESTING ITEMS FROM THE MONTH'S RECORD

Tax Burdens in Principal Countries



PER CAPITA TAXES IN PRINCIPAL COUNTRIES—*1913-1914 and 1938—The Conference Board—Before the World War, per capita taxes were considerably lower in all countries than they were in 1938, and there was a somewhat different inter-country distribution of heaviest per capita tax burdens.*

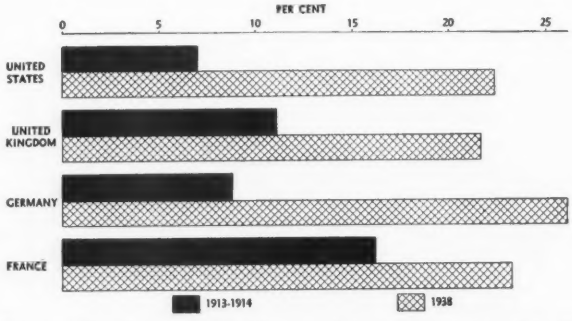
IN DOLLAR VALUES, per capita taxes in the United States in 1938 at $107.51 were 29 cents less than those in the United Kingdom, and $1.18 under the German per capita collections, The Conference Board reports in a recent study. Taxes in Canada, France, and Italy, at respective values of $76.76, $54.51 (in 1937), and $30.90 per capita, were all lower than the United States totals.

In comparison with national income, however, the variations between countries in 1938 were considerably less wide. Only Germany had a ratio of tax collections to national income of more than 25 per cent, while the ratios for the other principal countries were: United States, 22.4 per cent; Canada, 20.7 per cent; United Kingdom, 21.7 per cent; and France, 23.3 per cent (for 1937).

In past years, tax burdens were much lower in all the countries, and per capita levies showed a somewhat different inter-country relationship. The pre-war period 1913-1914 found France with the largest per capita levies and Canada and the United Kingdom following close behind, while the United States came in fourth, and Germany and Italy collected in taxes only about half as much per person as did France. These per capita comparisons in dollars are affected, of course, by exchange, currency fluctuations, and purchasing power of its money within a State. The United States had the lowest ratio of tax collections to national income during the 1913-1914 period among the countries considered, while France had the highest.

In some of the countries, most of the increase in the per capita burden of taxation occurred during the War, while in others, most of the increase occurred after 1919. The per capita burden in the United States increased 209 per cent between 1913 and 1919, compared with 370 per cent between 1913 and 1938. In Germany, the rise between the pre-war period and 1919 was 36 per cent, as against 686 per cent between 1913 and 1938. French taxes were actually higher in 1919 than in 1937, being 125 per cent above 1913 in the former year and only 96 per cent above in the latter. These figures are also based on United States dollar values.

Between 1913 and 1938, per capita tax collections in the United States in dollars increased four-fold. Taxes in Canada, in Canadian dollars, were about three times as large at the end of the period, while the number of pounds sterling collected per person in the United Kingdom had quadrupled, the number of reichsmarks in Germany had also quadrupled, the number of francs in France had increased nine-fold, and the number of lire collected per capita in Italy had increased eight-fold.

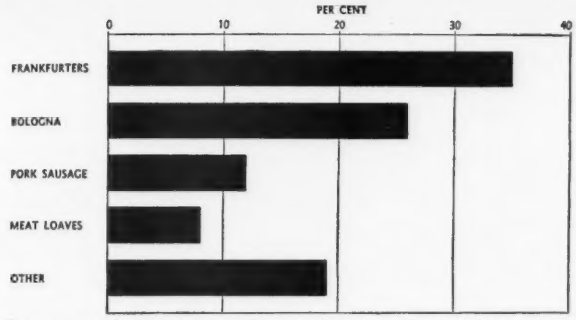


RATIOS OF TAX COLLECTIONS TO NATIONAL INCOME—*1913-1914 and 1938—The Conference Board—The ratios in the different countries showed more variation before the World War than they did in 1938, when tax collections in all of the countries amounted to more than 20 per cent of national income.*

The Savory Sausage

ONE "CONSOLIDATED SAUSAGE" has replaced hundreds of different varieties in Germany since the outbreak of the war, but Americans, fortunately, can still eat the particular sausage whose flavor they favor. Frankfurters and bologna are the most popular varieties in this country, according to the 1937 Census of Manufactures. These two kinds accounted for more than 60 per cent of the total amount of fresh sausage produced in all commercial establishments in that year, and amounted to more than 800,000,000 pounds, as estimated by the Institute of American Meat Packers.

Frankfurters alone made up 35 per cent of total sausage production in this country, while bologna accounted for 26 per cent, pork sausage for 12 per cent, meat loaves for 8 per cent, and other varieties for 19 per cent. Total production of fresh, dry, and canned sausage in 1937 amounted to 1,467,180,000 pounds, the Census reveals. This represents a per capita consumption of almost 12 pounds of



PERCENTAGE DISTRIBUTION OF VARIOUS KINDS OF SAUSAGE PRODUCED—*Census of Manufactures: 1937—Frankfurters and bologna were produced in much larger quantities than pork sausage and meat loaves; "other" kinds of sausage made up 19 per cent of the total output.*

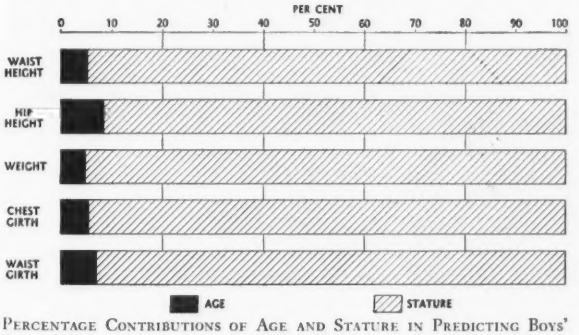
sausage in that year, as compared with a per capita consumption of about 10 pounds in 1931.

Total sausage production in 1937 was the highest on record, exceeding the previous peak attained in 1935 by about 8 per cent and the 1929 level by about 10 per cent. The total value of product was lower in 1937 than in 1929, however, due to a decline in price.

Prevention of Misfits

INEFFICIENT SIZING of children's garments and patterns has long worried clothing manufacturers, merchants, and mothers. The problem has now been scientifically examined by the Textiles and Clothing Division, Bureau of Home Economics, U. S. Department of Agriculture. Under its direction, as part of a WPA project, 36 measurements were made on each of 147,088 children between 4 and 17 years old. In place of the former "age" classifications, any one of three groups of two measurements was found more accurate in forecasting an all-over fit: height and weight, height and girth of hips, or height and girth of chest.

Among the children studied, those in the Western States were larger for their age than those in other sections, while those in Southern States were smaller. Children from more prosperous homes were consistently larger.

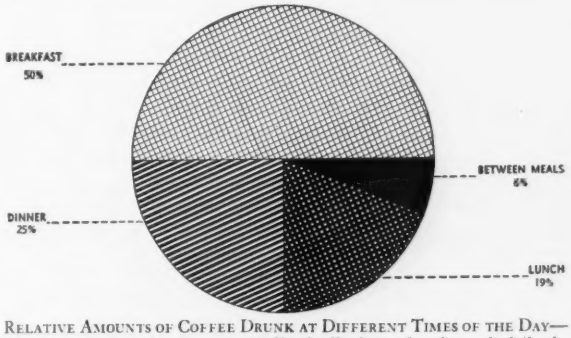


PERCENTAGE CONTRIBUTIONS OF AGE AND STATURE IN PREDICTING BOYS' BODY MEASUREMENTS—*1939—U. S. Bureau of Home Economics—The correlation of stature with other body measurements is higher than that of age with the same body measurements in 90 per cent or more of all cases.*

If only one measurement were to be used, weight was found to be the best, girth of hips second best, and age the poorest. Of all possible combinations of two measurements, the best were waist height and a girth (or weight), or total height and a girth (or weight). A combination of height and hip measure was recommended as a basis for sizes of patterns and garments. There was prepared a standard system of 39 sizes for boys and 36 for girls representing 89.1 per cent and 86.0 per cent of the samples, respectively.

Coffee Drinking

COFFEE IS SERVED regularly every day in 92 per cent of all homes in the United States, according to a national survey of coffee consumption conducted under the auspices of the Pan-American Coffee Bureau. Practically all coffee drinkers drink coffee for breakfast, about half have it for dinner, and less than half have it for lunch.



RELATIVE AMOUNTS OF COFFEE DRUNK AT DIFFERENT TIMES OF THE DAY—*Pan-American Coffee Bureau—Half of all the coffee brewed daily by American housewives is consumed by their families at breakfast; only 6 per cent is drunk between meals.*

Analysis of the coffee consumers themselves indicated that the beverage is drunk by 82 per cent of all men over 16 years of age, 81 per cent of all women over 16, 15 per cent of all children between 6 and 16, and 4 per cent of all children under 6 years of age. Adult per capita consumption is highest in the West North Central part of the country and lowest in New England. Total per capita consumption (including children) was also highest in the West North Central States, but lowest in the East South Central section. The United States average was 13.9 pounds per capita.

Hot coffee is well-nigh universal in use, according to this survey, but iced coffee is primarily an upper class, Northeastern drink. Reports from New England and Middle Atlantic States showed that 37 per cent of the families in these sections serve iced coffee in the Summer, while 14 per cent of those on the Pacific Coast do likewise, and only 10 to 12 per cent of the families in all other parts of the country serve it. The percentage of families who drink iced coffee is considerably higher in cities than on farms or in villages.

HERE *and* THERE *in* BUSINESS

WHAT'S NEW AS OBSERVED BY THE AGENCY'S REPORTERS

PORTABLE—*Riveter using the new portable rivet gun made by the Mine Safety Appliances Company, Pittsburgh, Pa.*

Peace Gun—Velocity power tools were introduced about two years ago, but recently the machines have been made more compact, others added to the line. They are a modified form of gun; shoot a piston instead of a bullet. The pistons, and attachments for them, will cut steel wires, splice cable, drive holes, and drive steel rivets and studs.

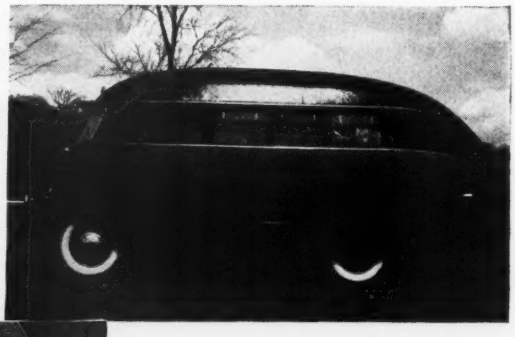
The Mine Safety Appliances Company, Pittsburgh Pa., make the tools. Their rivet driver will punch round, square, or oblong holes in steel plate, nudge a rivet through the hole, drive solid or hollow threaded steel studs through boiler plate. The line also includes rivet expanders and removers, a pipe bonding press, and a cable cutter. Most of these also work under water. They are all portable, as power comes from smokeless powder cartridges.

Stockholders—First, companies enlivened their annual reports; then they pulled directors out of cities to meet at factories or on the railroad they were managing. Next, some companies made a place on the proxy for shareholders to vote for whatever auditing firm they want; and now we see the beginning of sectional stockholder meetings. Last September, General Mills, Inc., Minneapolis, Minn., held one of these, a district meeting, at Detroit, Mich.

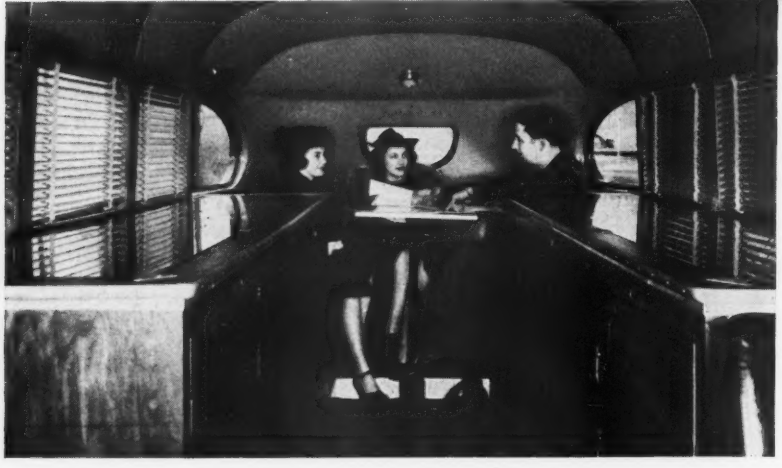
Reaction to the first district meeting was so favorable that the company has planned fifteen. Minneapolis, Boston, and Buffalo will probably have meetings at which local stockholders will be invited to talk over company business informally. The program included camera slides showing company officers, talks on the annual report, hedging, and inventory control. Stock owners who attended dined on Wheaties and Corn KIX, two company products.

GIFT—*To Virginia's revered Lee plantation General Mills, Inc., Minneapolis, Minn., gave the milling machinery for this rebuilt, 1740 grist mill.*

Sales Car—After six years of experimentation with various sales cars, Western Printing and Lithographing Company, Racine, Wis., has a fleet of ten new ones, specially designed to appear lengthy but fit in small parking spaces. The cars are really mobile sales rooms, have six feet, two inches of head room, are 20 feet from bumper to bumper. Each is mounted on a Ford V-8 chassis.



SALES ROOM—*Car on Ford V-8 chassis, designed by Brooks Stevens, Milwaukee, for the Western Printing and Lithographing Co., Racine, Wis.*



Salesmen for the Whitman Publishing Company, New York, a subsidiary of Western Printing, use the cars. Inside each vehicle are sample cabinets and glass-topped display trays for showing the firm's line of playing cards, books, and games. Upholstery is of oyster gray leather from the lower window line up and over the ceiling. From the lower window line to the floor, the wall coverings are of a deep blue, morocco grain leather. Handles and knobs are recessed. To swing a prospective buyer into a receptive mood there's a push button radio. Two car heaters

United States Fire
Insurance Company of New York
Organized 1824

FINANCIAL STATEMENT AS OF SEPTEMBER 30, 1939

ASSETS		LIABILITIES	
Cash in Banks and Trust Companies	$5,191,928.19	Reserve for Unearned Premiums	$9,884,267.11
United States Government Bonds	8,899,143.38	Reserve for Losses in Process of Adjustment	1,424,731.00
Other Bonds and Stocks	17,825,337.61	Mortgage Reserve	75,000.00
Mortgage Loans on Real Estate	253,726.68	Dividends Declared and Unpaid	250,000.00
Real Estate	405,880.73	Other Liabilities	708,430.95
Premiums in Course of Collection (Not over 90 Days)	1,096,828.44	Capital	$2,000,000.00
Bills Receivable, Not Due	149,449.46	Net Surplus	19,563,466.82
Interest Accrued	83,146.97	SURPLUS TO POLICYHOLDERS	21,563,466.82
Other Assets	454.42		
TOTAL ADMITTED ASSETS	$33,905,895.88		$33,905,895.88

On the basis of September 30, 1939 Market quotations for all Bonds and Stocks owned, the total admitted assets and surplus would be increased by $138,025.01. Securities carried at $3,201,054.79 in the above statement are deposited as required by law, of which $2,500,000 par value in United States Government Bonds are held by the Superintendent of Insurance of New York.

HOME OFFICE: 110 WILLIAM STREET, NEW YORK, NEW YORK

WESTERN DEPT., FREEPORT, ILL. PACIFIC DEPT., SAN FRANCISCO
ALLEGHENY DEPT., PITTSBURGH SOUTHERN DEPT., ATLANTA, GA.
CAROLINAS DEPT., DURHAM, N. C.

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for prices; or let our famous "Letterhead Clinic" submit a new and modernized design—FREE!

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Many of our customers in places as far distant as Seattle send us merely rough sketches of a layout, with copy or text in typewritten form, and depend upon us to make the art work, set the type and print the job.

We've printed billions of result-producing mailing pieces for customers we've never seen, at prices that represent a real saving.

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MAIL THE COUPON for folder of famous letterheads we've designed or lithographed. Send your own letterhead for an all-time low price quotation on quality work. Or, ask our Art Staff (The Letterhead Clinic) to give you suggestions—FREE of charge—on a new and modern design for your old letterhead. Mail the coupon—NOW!

UNIVERSAL LITHOGRAPHING CO., Dept. 72
4313 Diversey Ave., Chicago, Ill.

Send your folder of famous letterheads, with prices and samples of stock.

☐ Enclosed is our present letterhead. Quote price on lots of.....

☐ Have your Clinic submit suggestions—without charge or obligation—on redesigning the enclosed letterhead.

Name.....

Address.....

City.....*State*.....

keep the chill from his shoulder. He sits in a deep blue leather divan, and venetian blinds soften the sunlight for his eyes.

The cars were designed and built under the supervision of Brooks Stevens, industrial designer, Milwaukee, Wis. In them a salesman is host to the purchasing agent; and perhaps that's a favorable psychological point.

Vitamin—Currently agitating the flower growing trade is a product which has strange effects on plants. Its use has produced tea rose buds 5 inches long, cottage tulips on 30-inch stems, hyacinths with 12-inch heads riding 27-inch stems, snapdragons 6½ feet tall, and daffodils as big as a salad plate, topping 42-inch stalks thick as a man's thumb.

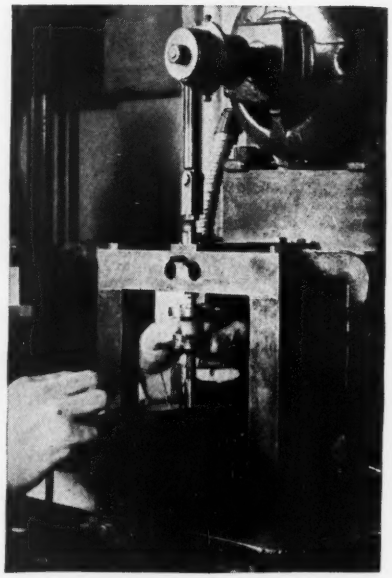
Secret of this giant-growing is a well-known vitamin called B_1. Scientists at the California Institute of Technology, Pasadena, put B_1 in the watering pot and found it strengthened roots.

By Spring the vitamin should be available in retail seed stores at $1 for each Lilliputian sized pill bottle holding 100 milligrams. A number of chemical firms and seed houses are already offering it. When the consumer gets B_1, he mixes one milligram, pinhead small, with 20 drops of water. Twice a month, he places one drop of this solution in either a quart or a gallon of water, for maximum or minimum strength. Thus, a $1 bottle can make 2,000 gallons. All of which is most startling; but let's hope nobody applies B_1 to those cannibal plants that snap up flies.

Utility—A public utility in Fairmont, W. Va., now has a man on its staff whose job is to help customers on matters which have no connection with any of its products.

As do many other firms selling to farmers, this company, the Monongahela West Penn Public Service Company, employs an agricultural counselor. But his job is different, for he's paid to give advice on any farm subject which will increase the farmer's income. He has sponsored potato and buckwheat marketing co-operatives, acted as secretary of dairy cattle and pure-bred bull shows.

For two years the utility has also operated through 30 rural representatives who specialize in doing everything except line construction and major repairs. They read meters, handle collections, advise customers, sell appliances, handle public relations. Appliance sales from these representatives, says the company, have been sufficient to carry expense loads for all the other duties they performed.



TEST—*Riding a rapidly vibrating lever, sample tires take 1,800 impacts a minute in B. F. Goodrich Company blowout tests. This machine duplicates road strains.*

Movies—A new catalogue of industrial motion pictures available from the General Electric Company, Schenectady, N. Y., lists 79 sound and silent films, GE sponsored. Each film is classified as 16mm. or 35mm., sound or silent, and general or technical. The range of subjects includes "Conquest of the Cascades," "Hottest Flame in the World," "Life of Edison," "*The Zephyr*," and "A Woolen Yarn."

Ingenuity—One of the crosses department store buyers must shoulder is pacifying customers who demand products and doo-dads not in stock. Knowing this, J. Howard Denny, president of New York City's Franklin Simon & Company, thought his buyers might have some suggestions which could be developed into merchandise. More in fun than as an important store promotion, he started an Ingenuity Contest. Small cash prizes were offered for original and patentable products.

Response was pretty amazing. Buy-

ers produced 25 original ideas. The cosmetics buyer invented a hand lotion called "Digadoo." The shoe buyer thought of a woman's "no-bite" pump, which stretches across the instep, soothing customers who expect their shoes to give full measure as the Bible ruleth —pressed down and running over.

The economy dress buyer whipped together a time-saving dress for office girls. Its virtue is that by the addition of those glittering gilt accessories women worship, a stenographer transforms herself into a sub-deb, and dances straight from her typewriter to a fashionable cocktail party. Afterparty "snacks" found need for another suggestion, the "snack coat," a cellophane wrapper which protects a hostess's evening dress in the kitchen.

Big Audit—Auditing the entire State of New Hampshire, including individual income, savings, government expenses, business, agricultural enterprises, and potential resources, was suggested in 1937 by Governor Francis P. Murphy. The audit was made for the year 1936 and is reported by Chairman Samuel Crowther, co-author of books on Henry Ford, in a booklet called *What We Earn; What We Owe.* A number of business men and companies financed the work, so that the State suffered no expense.

Supported by balance sheets and income statements, the report shows that in 1936 New Hampshire business lost $6,925,000. Governments spent $11,637,000 in excess of taxes. Individual savings amounted to $13,761,000. Government, business, and banking showed a net loss of $17,750,000. At least 17.9 cents of every consumer dollar went to the tax collector. Business lost money, but banking showed a gain of $812,000.

The commission found that manufacturing and utilities had 35.4 per cent of the State's physical assets used in business. These assets yielded 61.4 per cent of individual cash income. Agriculture held 24.2 per cent of the physical assets used in business; but these assets produced only 5.1 per cent of the cash income to individuals.

Costumer—On stormy days in crowded offices the five-o'clock rush includes collecting hats, coats, umbrellas, and rubbers from lockers and various odd corners. To hold all these in small offices, the Vogel-Peterson Company,

Beauty tames the beast.

(of business detail)

Does work stick on your desk like fly-paper? Do details buzz, buzz around your head? Turn all your troubles over to this handsome new desk Ediphone. Compact as a box of cigars... and completely enclosed!

...on your desk... or at your desk

It's fun to see how this "business valet" sweeps everything off your desk. Notes, letters, memoranda, reports and instructions don't pile up. Just talk your work away... that's Ediphone Voice Writing.

Choose from two newly designed Ediphones—the "streamlined" cabinet type that takes up only a square foot of floorspace, or the 8½" x 11" Ediphone for your desk. Try one yourself. No strings attached. Write Dept. D2, Thomas A. Edison, Inc., West Orange, N. J. In Canada, Thomas A. Edison of Canada, Ltd., 610 Bay Street, Toronto.

SAY IT TO THE **Ediphone**
EDISON VOICEWRITER

THE CHASE NATIONAL BANK

OF THE CITY OF NEW YORK

Statement of Condition,
December 30, 1939

RESOURCES

Cash and Due from Banks	$1,293,142,974.89
Bullion Abroad and In Transit	1,531,789.02
U. S. Government Obligations, direct and fully guaranteed	820,169,815.83
State and Municipal Securities	115,818,216.32
Stock of Federal Reserve Bank	6,016,200.00
Other Securities	135,271,736.00
Loans, Discounts and Bankers' Acceptances	636,176,032.45
Banking Houses	33,230,012.74
Other Real Estate	8,203,128.99
Mortgages	10,423,953.28
Customers' Acceptance Liability	17,688,487.54
Other Assets	8,146,711.44
	$3,085,819,058.50

LIABILITIES

Capital Funds:		
Capital Stock	$100,270,000.00	
Surplus	100,270,000.00	
Undivided Profits	33,021,785.02	
		$ 233,561,785.02
Dividend Payable February 1, 1940		5,180,000.00
Reserve for Contingencies		15,314,589.22
Reserve for Taxes, Interest, etc.		1,850,485.58
Deposits		2,803,730,326.31
Acceptances Outstanding		19,884,330.28
Liability as Endorser on Acceptances and Foreign Bills		1,570,723.08
Other Liabilities		4,726,819.01
		$3,085,819,058.50

United States Government and other securities carried at $104,897,563.40 are pledged to secure public and trust deposits and for other purposes as required or permitted by law.

Member Federal Deposit Insurance Corporation

Inc., Chicago, Ill., has devised a most compact piece of equipment which serves six or twelve persons, but occupies a maximum floor area of only 30 inches square. The maker calls this new costumer "The Office Valet." It has ventilated and divided shelves for hats, a hanger bar for coats, an umbrella rack, and a shelf at the bottom for overshoes.

Chemurgy—When folks read about some new use for a farm product, such as making Ford luggage compartment doors from soy beans, there's an even chance that a Columbus, Ohio, organization called the National Farm Chemurgic Council knew all about it first. The council co-ordinates and promotes the use of surplus farm crops in industry.

Among current chemurgy news is erection of a large plant in Lufkin, Tex., to make newsprint from Southern pine by a process discovered several years ago. Another is work on tung oil production in Gainesville, Fla., and along the Gulf Coast. The latter isn't a surplus crop, but is being developed in this country to meet a need.

Chemurgists are interested in Laurel, Miss., where starch is being made from sweet potatoes, Belfast, Me., where a small plant is experimenting with glass-clear plastics from Irish potatoes.

North Texas State College last year claimed the first class in chemurgy. Its students made face powder from bull nettles, rope from a yucca plant. At Sam Houston State Teachers College, Texas, another class made newsprint from castor bean stalks.

Cream Puffs—Chicago research chemists have been taking the temperature of custard cream puffs and apple pies. The American Institute of Baking sponsors the tests, which are to determine the best method for preservation and storage of baked goods.

Preliminary work consisted of freezing fresh cakes, icings, and custard-

HONORS—*To William L. Batt, engineer-trained president of SKF Industries, Inc., Philadelphia, Pa., have come chairmanships of the Business Advisory Board, U. S. Department of Commerce, and of the American Management Association.*

filled baked goods at various temperatures. At intervals of a day, a week, two weeks, a month, and monthly thereafter for four months, the frozen goods were tested by organoleptic methods. (An organoleptic test is one made by taste, touch, and scent.) These tests, according to a report published in the Institute of Baking's *Monthly Bulletin,* showed that four-month old iced and un-iced layer and angel food cakes, when thawed out, could not be distinguished in aroma and taste from those 24 hours out of the oven. Whether they were frozen at —8° or —30° F. made no apparent difference.

Refrigerated—Standard refrigerated locker systems (DUN'S REVIEW, November, 1939) for apartment hotels and branch locker plants are being made by Iceberg Refrigerated Locker Systems, Inc., in Chicago, Ill. Each unit has 48 drawer-lockers, its own refrigeration mechanism, and its own insulation.

Locker units can be taken apart with a screw driver and monkey wrench if moving is necessary. Dimensions are 18 feet long, 6 feet 6 inches wide, and 7 feet high.

The refrigerator section includes a display cabinet for merchandising. The company says that locker plants are a logical distribution point for frozen foods. It recommends to hotels installing the lockers that a local distributor of commercially frozen foods service the unit.

GOOD BUSINESS NEWS

How Switch in Financing Methods Started Phenomenal Come-Back

Struggling Company Increases Volume 400% In Five Years—More Than Doubles Net Worth

EDCO, Inc.*, was a small and struggling concern in 1933. Its treasury had been practically gutted by reverses of the previous few years.

With credit refused by the trade, loans denied it by the banks, the company hopefully turned to us to negotiate advances on its accounts receivable.

The result strikingly demonstrates how utterly the old conventional methods of financing fail in times of greatest need, and how completely our flexible "Non-Notification" Open Account Financing meets the requirements of modern business.

Where others saw only a sorry financial statement and *refused* the risk, we saw a going company with annual sales amounting to $200,000 and with excellent possibilities of even greater volume and a successful future. We were perfectly willing to advance cash on current receivables and on further sales as made, shipped and invoiced.

From that point, the affairs of EDCO, Inc. took a turn for the better. Sales increased each year. Net profit ratio improved. Trade credit was restored. Today, the company's net worth stands at $40,000 as against $17,000, and sales have gone up from $200,000 to $1,000,000 annually.

* * * *

If you are having any kind of trouble, in arranging your financing, let the experience of EDCO, Inc. point the way to a quick and thoroughly sound solution. Our vast resources and long experience in industrial financing enable us to cope successfully with almost any problem. Write for our new pamphlet "COMPARATIVE COSTS OF FINANCING". Address your request to Department DR.

**A fictitious name, but the facts and figures, taken from our records, can be certified.*

COMMERCIAL CREDIT COMPANY

"Non-Notification" Open Account Financing

BALTIMORE

BOSTON NEW YORK CHICAGO SAN FRANCISCO PORTLAND, ORE

CAPITAL AND SURPLUS MORE THAN $63,000,000

THE NATIONAL CITY BANK
OF NEW YORK

Head Office · 55 WALL STREET · *New York*

Condensed Statement of Condition as of December 31, 1939

INCLUDING DOMESTIC AND FOREIGN BRANCHES

ASSETS

Cash and Due from Banks and Bankers		$ 933,912,307.44
Gold Abroad or in Transit		11,257,409.00
United States Government Obligations (Direct or Fully Guaranteed)		733,592,490.94
Obligations of Other Federal Agencies		50,452,489.29
State and Municipal Securities		107,874,136.92
Other Securities		63,123,003.86
Loans, Discounts and Bankers' Acceptances		530,725,121.57
Real Estate Loans and Securities		8,352,084.29
Customers' Liability for Acceptances		14,371,236.29
Stock in Federal Reserve Bank		3,735,000.00
Ownership of International Banking Corporation (Including Paris Office)		8,000,000.00
Bank Premises		42,676,270.91
Other Real Estate		484,639.84
Other Assets		839,497.88
Total		$2,509,395,688.23

LIABILITIES

Deposits		$2,331,257,943.67
Liability on Acceptances and Bills	$28,727,596.58	
Less: Own Acceptances in Portfolio	10,771,618.85	17,955,977.73
Items in Transit with Branches		3,267,133.69
Reserves for:		
Unearned Discount and Other Unearned Income		4,186,515.04
Interest, Taxes, Other Accrued Expenses, etc.		4,609,533.87
Dividend		3,100,000.00
Capital	$77,500,000.00	
Surplus	52,500,000.00	
Undivided Profits	15,018,584.23	145,018,584.23
Total		$2,509,395,688.23

Figures of Foreign Branches are as of December 23, 1939.

$49,283,608.00 of United States Government Obligations and $24,054,871.26 of other assets are deposited to secure $46,258,137.51 of Public and Trust Deposits and for other purposes required by law.

(Member Federal Deposit Insurance Corporation)

LEAN YEARS FOR THE RAILROADS

(Continued from page 28)

In view of the lessened earning power it is logical to believe that most rail managements should recognize that old capitalizations, which may have been justified by earnings of the pre-diversion era, are now a threat to the railroads' efficient operation and should be pruned at every opportune moment.

Yet we have the example of the Lehigh Valley Railroad, an anthracite carrier whose hard coal revenues in 1937-1938 averaged $6,000,000 less than in 1928, trying eagerly to consummate a voluntary interest readjustment plan which calls for partial deferment of interest and the accumulation of the unpaid portion over a five-year period. The Baltimore & Ohio is in much the same boat, financially, as is the Lehigh. Yet its 78-year-old president, Daniel Willard, pleaded before a Senate committee which was considering the Chandler Bill, "Don't force this last disgrace (bankruptcy) on me." Mr. Willard's plea typifies the psychological attitude of most rail managements toward capital readjustments.

In regard to capitalization, the railroads point out that net capital outstanding in the hands of the public, as of the end of 1937, totalled $18,319,000,000, as against the ICC railroad property valuation of $20,269,000,000. But in view of curtailed earnings, it undoubtedly is a mistake to consider reproduction cost the proper basis for evaluation of railroad property.

It seems that earning power should be the controlling consideration regardless of original investment. While a number of railroads have set excellent examples by pursuing a careful depreciation policy and pruning capital structures, the industry as a whole has failed to take the proper precautions. About one-third of the carriers are now undergoing involuntary surgical operations upon their capital structures as a result, and it is vital for the solvency of most of the others that they take what steps are necessary and feasible to adjust capitalizations to the new competitive and economic situation.

To the extent that they are permitted,

the railroads also should abandon unprofitable mileage. If the 230,000-mile railroad plant is now larger than the demand for railroad service requires, it should be shrunk both by abandonments and by consolidation and mergers. Abandonments have been going on apace. But consolidation and mergers have gotten nowhere because of opposition both from rail managements and labor—opposition, incidentally, that is motivated by the same fear, loss of jobs. Commissioner Carroll Miller of the ICC has estimated that mergers could raise rail net by $500,000,000, adding that unless rails merge privately they will do so under government ownership.

Expenses must, of course, be carefully pared. One of the chief items of operating expense is labor. While most rail workers cannot be said to be overpaid, locomotive engineers, firemen, brakemen, and train conductors enjoy advantages under the so-called "feather-bed" rules which are grossly unfair not only to the railroads but to other employees as well.

The railroads have made great strides in improving service and adjusting rates so as to hold slipping traffic. But scrimping to meet interest payments has forced many roads to let their plants run down. Some means must be found to modernize plant and equipment, either by paring of capitalizations so that credits can again be attracted or by government loans to modernize plant and equipment. To date, rehabilitation on a large scale has been possible only by the bankrupt carriers which, freed of their fixed interest obligations, have poured earnings into equipment and plant.

Despite vicissitudes of the last decade, the railroads will continue to play a vital rôle in the country's economy. Bulk goods, such as grain, building materials, fuels, heavy industry goods, must continue to rely on rail transportation for economic long hauls. An important rôle for rail transportation is assured over the predictable future.

The industry, having recognized that its one-time monopoly position is a thing of the past, and that billions of dollars have been invested in competing forms of transportation, must take effective steps to readjust itself to a new and perhaps lesser niche in the country's economic scheme of things.

A BUSINESS CONTROL SYSTEM

SHE BRINGS THE MONEY IN
Here the collection clerk uses Kolect-a-Matic Visible Ledger to go after past dues. It's signaled to sort them out.

SHE POSTS THE LEDGER
Posting the Kolect-a-Matic Visible Ledger is far faster—because accounts are instantly located.

HE GOVERNS CREDIT EXTENSION
Kolect-a-Matic signals greatly facilitate granting of credit. Every danger point stands out.

FINANCIAL MANAGEMENT'S THREE BIG JOBS
Are a lot easier NOW

Take collections. The Kolect-a-Matic Visible Ledger ages every account visibly, tells you in seconds who owes most and longest, flashes every fact of what you've done to get your money back. Never previously has a ledger contributed so directly to controlled collections.

Take ledger posting. The Kolect-a-Matic Visible Ledger finds wanted accounts instantly. It feeds forms to machines as fast as they can take them. You no longer search before you post. You no longer fumble to find. Here is the most significant development in bookkeeping since mechanical posting.

And as for credit extension. The Kolect-a-Matic Visible Ledger watches limits for you. Every important situation is signaled. Right from your record of accounts you take the guidance that catches dangerous trends before they're serious. No other ledger permits so close control.

You'll find the Kolect-a-Matic Visible Ledger perfectly adaptable to your conditions. You need not change routine or essential forms—except to gear procedure to Kolect-a-Matic's greater operating speed. And you'll get your savings from the moment you combine financial management's three most important jobs—collections, ledger posting, credit extension.

Send for Remington Rand's new Kolect-a-Matic Visible Ledger catalog. It is the most graphic presentation of visible control ever published, profusely illustrated, complete with all the interesting facts. This new booklet is yours for the asking—and without obligation. Just mail the coupon to Remington Rand Inc., 465 Washington St., Buffalo, N. Y., in Canada, 199 Bay St., Toronto.

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Remington Rand Inc. BUFFALO, NEW YORK

Please send me the Kolect-a-Matic catalog, KD 199. I want to know how this new ledger will control my bookkeeping.
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"MAYBE IT IS JUST A DETAIL, BUT STOPPING FILE LOSSES HAS SAVED US A LOT OF MONEY!"

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"Now all our files are in *perfect* order. We use Acco Fasteners to bind *all* our records. And the boss hasn't had a complaint to make since. Says Acco Fasteners have saved us lots of money and made the office twice as efficient."

You can stop the loss of important papers if you'll ask your stationer or write us about Acco Fasteners *now*.

ACCO PRODUCTS, Inc.
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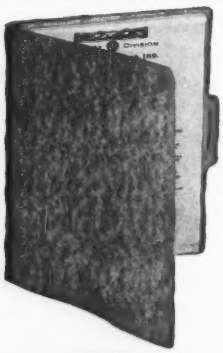

ACCO FASTENERS & FOLDERS

THE BUSINESS BOOKSHELF

BUSINESS . . . FINANCE . . . ECONOMICS . . . GOVERNMENT

A BREATHTAKING and mental-horizon-broadening 396-page report of the National Resources Committee is entitled, *The Structure of the American Economy,* Part I, *Basic Characteristics.* It is available from the Superintendent of Documents, Washington, D. C., for $1. The scope of the material it presents is nation-wide.

The report begins with the thought that the power of individuals to produce is a resource. Like unharnessed water power, each day it is unemployed it is lost forever. Basic characteristics of the power to produce are examined under three headings: economic bases of production, the wants and resources of people; geographic, functional, and financial aspects of the production structure; and influences which organize human production power.

These topics and the chapters on them, says the introduction, are not intended to fit together into a unified picture. They are, instead, a series of different points of view from which to consider the national economy. Among the "points of view" are consumer wants, resources to meet them, price structure, organization, and controls of economic activity (including charts of interlocking directorates).

More than half the book is devoted to appendices. The subjects include consideration of such varied subjects as the accuracy of U. S. Bureau of Labor Statistics material, wholesale price data, relation of tariffs to the price structure, the rôle of labor organizations, and maps of industrial location in 1935.

THE plan for using *Your Income Tax—How to Keep It Down,* by J. K. Lasser (Simon & Schuster, $1) is simple. It begins with a reproduction

CURRENT READING

BOOK	SUMMARY
GOLDEN AVALANCHE, by Frank D. Graham and Charles R. Whittlesey. Princeton University Press, 233 pages, $2.50.	The economic and political significance of the United States gold stock, now approximately 60 per cent of the world's supply of monetary gold. How we have accumulated it, what we may do with it, and consequences of what we may do.
THE EBB AND FLOW OF INVESTMENT VALUES, by Edward S. Mead and Julius Grodinsky. Appleton-Century, 513 pages, $5.	An explanation of the movements of investment values in terms of the influences which produce changes in corporate profits; more emphasis is placed on demand factors which produce changes in corporate income than is given to supply factors.
NEW ENGLAND COMMUNITY STATISTICAL ABSTRACTS, by Ralph G. Wells and John S. Perkins. Boston University College of Business Administration, $3.50.	Social and economic data for 175 New England towns and cities, prepared for the Industrial Development Committee of the New England Council; of use in determination of market potentials.
INDUSTRIAL HEALTH, by C. O. Sappington. Industrial Commentaries, 306 pages, $3.75.	The problems of industrial health looked at not as subjects for welfare work, but as opportunities to reduce the costs of employee absence, labor turnover, spoilage, inefficiency, fatigue, accidents, and unemployment compensation.
GOVERNMENT AND ECONOMIC LIFE, by Leverett S. Lyon, Myron W. Watkins, and Victor Abrahamson. Brookings Institution, 519 pages, $3.	An interpretation of public economic policy in America. Trends and current issues are discussed in the light of economic forces and governmental actions which have influenced and conditioned them; sections on anti-trust laws, fair trade, monetary problems, and labor and patent laws.
TURNING POINTS IN BUSINESS CYCLES, by Leonard P. Ayres. Macmillan, 227 pages, $2.75.	The causes of business cycles and how they have worked themselves out, explained through a study of periods of prosperity and depression in the 109 years since 1830.
INDUSTRIAL ORGANIZATION AND MANAGEMENT, by Ralph C. Davis. Harpers, 622 pages, $5.	In 1928 the author wrote *Principles of Factory Organization and Management;* this new volume, a complete rewriting of the earlier book, grows out of the ten years' changes in the scope and execution of managerial responsibilities.
CONFERENCE BOARD STUDIES IN ENTERPRISE AND SOCIAL PROGRESS. National Industrial Conference Board, 317 pages, $5.	Based on a quarter-century of research by the staff of the Conference Board, the story of American enterprise and its contribution to prosperity and public welfare. Charts, tables, and color plates: a wealth of statistical material.

of the 1939 income tax blank; on each line is noted the page where discussion of that topic begins.

There are many changes in, and additions to, last year's material. These include a long check-list of taxes deductible from gross income; an explanation of the new "last in—first out" method of calculating inventory; changes in the recommendation for taking losses on worthless registered stocks and bonds; and an explanation of the new net loss carry-over provision. The list of changes by Congress in basic laws and through interpretations by the United States Treasury Department and the courts made during 1939 is six pages long. The book is in non-technical language, so no one needs a legal dictionary to smoke out the meanings.

Where Treasury regulations are in doubt, the author says so, and recommends caution.

TO COMPILE the new *Human-Relations Manual for Executives* (McGraw-Hill, New York, 253 pages, $2) Carl Heyel, manager of the Conference Planning Division, American Management Association, classified hundreds of worthwhile ideas in magazine articles and news stories. From these he beat out most of the words to get at the kernel of facts.

It's a book from which you can learn. But it will be useful, too, as a reference handbook when there is a tough human relations problem. Perhaps the most valuable use of all will be as a source of inspiration—an aid to the starting of thinking—for all those who have supervisory or managerial responsibilities or aspirations.

If you read the book from beginning to end, you'll come out with a conviction that nobody knows how many things you have to worry about except you and Mr. Heyel. Probably you will select a specific chapter for reading. Then the mass of cases there have especially helpful shape and application. Of further help are check lists following each chapter.

AS HAVE the seven which came before it, the eighth *World Economic Survey, 1938-1939*, disposes one to think that men and nations, costumed with what-

CHEMICAL BANK & TRUST COMPANY

165 Broadway, New York

Founded 1824

CONDENSED STATEMENT OF CONDITION

At the close of business, December 30, 1939

ASSETS

Cash and Due from Banks	$391,152,269.46
U. S. Government Obligations, Direct and Fully Guaranteed	170,359,459.43
Bankers' Acceptances and Call Loans	39,844,636.93
State and Municipal Bonds	42,882,781.02
Other Bonds and Investments	43,518,644.75
Loans and Discounts	121,540,433.76
Banking Houses	1.00
Other Real Estate	5,333,275.99
Mortgages	2,338,664.51
Credits Granted on Acceptances	5,564,852.81
Other Assets	1,792,154.72
	$824,327,174.38

LIABILITIES

Capital Stock	$20,000,000.00	
Surplus	50,000,000.00	
Undivided Profits	6,744,054.83	$76,744,054.83
Dividend Payable Jan. 2, 1940		900,000.00
Reserves, Taxes, Interest, etc.		3,324,718.84
Acceptances Outstanding	$8,600,457.24	
(less own acceptances held in portfolio)	2,515,902.96	6,084,554.28
Other Liabilities		169,554.58
Deposits (including Official and Certified Checks Outstanding $4,878,035.41)		737,104,291.85
		$824,327,174.38

U. S. Government Obligations and other securities carried at $16,702,102.90 in the foregoing statement are deposited to secure public funds and for other purposes required by law.

Charter Member New York Clearing House Association
Member Federal Reserve System
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54 REPLIES IN 9 DAYS

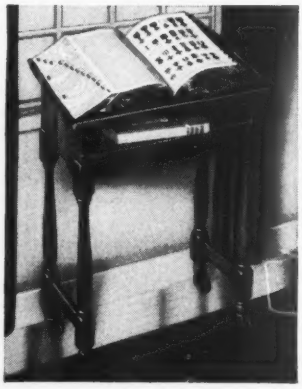
The Photo Record Corporation (electric copying machines) 111 Liberty Street, New York, ran a three-inch advertisement on page forty-eight of the January, 1940, DUN'S REVIEW.

That issue of the magazine was mailed on January 9 and first copies reached subscribers on January 10.

By the morning of January 19, the Photo Record Corporation had received fifty-four inquiries from their advertisement: 16 were signed by presidents; 3 by owners or partners; 6 by vice-presidents; 2 by general managers; 2 by treasurers; 3 by secretaries; 3 by assistant secretaries and treasurers; 19 other or no titles.

Twenty-eight of the inquiries were from manufacturers; 11 from wholesalers; 6 from banks, financial and insurance companies; 9 other.

(Note: Between January 19 and January 27, 41 additional inquiries were received, making a total of 95. It was not possible to analyze the latter replies in time for this issue.)



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EVERY office should have at least one copy of Webster's New International Dictionary, to serve as the court of final appeal on all matters having to do with words.

In this work you will find not only full, complete treatments of all terms peculiar to the business world, but also a vast store of information on any subject you may wish to know about.

Newly revised at a cost of $1,300,000, Webster's New International Dictionary, *Second Edition*, is *twenty years newer* than any comparable dictionary; it is made to serve *today's* needs.

Send for free booklet, "The New Merriam-Webster: What It Will Do For You," from the publishers, G. & C. Merriam Company, 72 Broadway, Springfield, Mass.

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San Francisco Los Angeles

ever ideas they may choose, nevertheless move against the economic backdrop of tabulations, bar charts, and graphs. The survey summarizes economic developments throughout the world. It has 247 pages, costs $1.50 in paper covers, and is distributed by the Columbia University Press.

Included are tightly-written dramatic chapters under such headings as: Recession and Recovery in 1938; Public Finance and National Income; Money and Capital Markets; Production and Prices; Employment, Wages, and the Standard of Living; Population and Migration; International Trade and Foreign Exchanges; Commercial Policy; and Economic Effects of War, Rearmament, and Territorial Changes.

To comprehend all this material is no work for headline skimmers. It requires close, careful reading.

As A SOURCE of inspirational bulletins, there's *The Selling Parade* by Charles B. Roth (B. C. Forbes, New York, 214 pages, $2). If you're a reader of sales stories, you know the hypnotic fascination in going through case after case of how the master salesmen always get their man.

Some of the stories are polished with age, others seem new. There's one with the teaser title "Putting Pants on Sales," another about refusing to hire a salesman because he knew all the radio programs, another about five ditch diggers hired to sell. If you've been a salesman, you'll probably slide along from one to the other, watching for those that happened to you.

The author is a sales and advertising counselor. His experience includes work for the Ford Motor Company and for other national sales organizations.

OVER THE EDITOR'S DESK

CONTRIBUTORS TO THIS ISSUE . . . COMING NEXT MONTH

IN THE National Bureau of Economic Research Dr. Ralph A. Young ("Who Buys What on the Installment Plan?") is Director of the Financial Research Program. At the Wharton School of the University of Pennsylvania, where he is chairman of the department of economics, Dr. Young has the rank of associate professor. His collaborator and research assistant, Blanche Bernstein, was previously a member of consumption research staff of the industrial section of the National Resources Committee.

LESTER VELIE

The study in which was developed the material for this article was initiated in 1938 as one phase of the National Bureau's investigation of consumer installment financing, the first project under the program of research in finance supported by special grants from the Association of Reserve City Bankers and the Rockefeller Foundation, and undertaken in co-operation with governmental agencies, financial organizations, private enterprises, and university specialists.

The National Bureau published late last month the first of a series of books titled Studies in Consumer Installment Financing; its title is *Personal Finance Companies and Their Credit Practices;* its authors: Dr. Young and associates; aspects of personal finance companies discussed: their significance in financial organization, methods of operation, credit practices and terms, collection experience, and earnings and expenses.

Other institutions of consumer installment financing that are the subjects of special studies which the National Bureau will publish soon are sales finance companies, commercial banks, industrial banking companies, and governmental agencies. Also in preparation are estimates of the monthly and annual volume of consumer installment credit, a description of the statistical pattern of consumer debt, and a study of the relation between consumer in-

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PETERSON Equipment answers locker room checking and home "wraps" problems — is standard in finest offices, buildings and institutions.

FOR OFFICES the patented 3-U Wardrobe Rack saves valuable floor space. Accommodates 3 persons per sq. ft.—hats, coats, overshoes and umbrellas. Eliminates locker room filth, theft and stalling. Rigid square tubular steel, beautifully finished in walnut, olive green or mahogany. Fits anywhere—any length by the foot. 4-ft. unit complete with 12 wooden hangers.

FOR THE HOME—Increases capacity of closets, wheels out—permits cleaning and sunning without handling of garments.

FOR CHURCHES, Hotels, Schools, Clubs, the Special "5-50" portable rack accommodates 50 people in 5 ft. Set up anywhere in a few minutes. Stores in less than 2 sq. ft. All steel, choice of 16 colors, complete with hangers and checks. Shipped to rated firms on 10 Day Approval. Write for Catalog showing most complete line built.

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You may use this Autopoint pencil only as a "door-opener"—but it stays, as a constant "silent salesman" for you, in most men's pockets. Autopoint is the pencil men love—with the Grip-Tite tip that holds even thin leads so perfectly they can't wobble, twist, slide out or break easily. 6000 firms use Autopoints; a book, "37 Plans—Getting And Holding Customers With Autopoint," tells methods and results. Write for it!

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stallment financing and economic stability.

FINANCIAL editor of the New York *Journal of Commerce,* Lester Velie, has as his daily stint the front-page column called the "Business Outlook." Born in Wisconsin, Mr. Velie was graduated from the University of that State and later studied at the School of Commerce, Accounts, and Finances, New York University.

After five years of general newspaper work for metropolitan papers and the Associated Press Mr. Velie turned to business writing, going first as financial editor to the *Literary Digest.* He has contributed to several of the better-known business periodicals.

EDITOR of DUN'S REVIEW, Director of Economic Research at DUN & BRADSTREET, Willard L. Thorp (pages 17-22) is also a constant commuter to Washington, where he has been serving as special economic advisor to Secretary of Commerce Harry L. Hopkins.

Helen Brown Russell, co-author of "Inventories During the War," is secretary to Dr. Thorp and a graduate of Ohio State University.

IN CURRENT plans for next month, in the series setting forth personal viewpoints of individuals well-known to business men, is an article by the Chairman of the Social Security Board, Arthur J. Altmeyer.

DUN'S REVIEW

290 BROADWAY NEW YORK, N. Y.

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Willard L. Thorp, *Editor;* Norman C. Firth, *Managing Editor and Business Manager;* Raymond Brennan, Edwin B. George, Walter Mitchell, Jr., A. M. Sullivan, *Associate Editors;* J. A. D'Andrea, *Statistician;* Clarence Switzer, *Art Director;* H. C. Daych, *Advertising Manager.*

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The contents of this magazine are indexed in the Industrial Arts Index. . . . Member C.C.A. . . . Copyright 1940, DUN & BRADSTREET, INC.

More detailed breakdowns of those statistical data originally compiled by the publishers—business failures, bank clearings, building permits, and price indexes which are summarized and interpreted each month in DUN'S REVIEW (see pages 38-43)—are published monthly in DUN'S STATISTICAL REVIEW, tables only, no text, $1 a year; $2 outside the United States.

HOW TO HELP YOUR EMPLOYES WHO NEED LOANS

YOU would hardly expect an employe who can't pay his bills to do his best work. Yet most workers have at some time unusually large bills—hospital care, traveling expense, taxes, for instance—which they can't pay out of current income or savings. Then they must borrow or fall behind. But where can they borrow?

Loans for workers

From your company? Your directors probably feel that the company cannot finance the emergency needs of *all* its workers. From a bank? Banks commonly require collateral which wage earners seldom own, or co-makers they can't readily get. From their friends? Friends usually need all they make for their own expenses.

To make loans to wage earners is the job of Household Finance. At Household responsible workers can borrow $20 to $300 on their character and earning ability. No endorser or bankable collateral is needed. No wage assignment is taken. Borrowers obtain their loans on terms which wage earners can readily meet.

How do they repay? In convenient monthly installments. Thus they can get out of debt without sacrifice of living standards. Each borrower may choose the payment plan which best fits his own situation and income. The table below shows sample loans and payment plans.

AMOUNT OF CASH LOAN ▼	AMOUNT PAID BACK EACH MONTH Including All Charges				
	2 mos. loan	*6 mos. loan*	*12 mos. loan*	*16 mos. loan*	*20 mos. loan*
$ 20	$ 10.38	$ 3.63	$ 1.95		
50	25.94	9.08	4.87		
100	51.88	18.15	9.75	$ 7.66	$ 6.41
150	77.82	27.23	14.62	11.49	9.62
200	103.77	36.31	19.50	15.32	12.83
250	129.71	45.39	24.37	19.15	16.04
300	155.65	54.46	29.25	22.98	19.24

Above payments figured at 2½% per month and based on prompt payment are in effect in New York and nine other states. Due to local conditions, rates elsewhere vary slightly.

Borrowers learn to stretch dollars

Last year Household made over 800,000 loans to families faced with emergency money problems. To these borrowers Household also gave help in money management and better buymanship, showed them how to get more out of limited incomes. Household's practical booklets developed for this work are now used as texts in hundreds of schools and colleges.

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Address.....
City.....*State*.....

INTERNATIONAL NEWS PHOTOS

The YES—BUT *Man*

A FRIEND of mine had spent several years teaching in college and in adult education. Why did he prefer working with college men? The grown-ups found it very hard to take any set of assumptions and discuss the conclusions logically and objectively, because somebody in the group was always interrupting with, "Yes, but I knew a case once when . . . ." The youngsters were thrown off the track much less often by individual past experiences, and could attack the problem with more logic and less emotion.

The normal activity of any business man is to deal with a series of specific problems, of "special cases." I've always remembered with great respect a manufacturer who said to me, "If the tariff is taken off my products, I'll be driven out of business, yet I've come to the conclusion that the national policy should be one of tariff reduction."

To be able to escape from any one special case, to *think* in the area of general principles and policies, requires a high level of mental maturity.

Willard L. Thorp.

EDITOR